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Combined Anaerobic/Aerobic Secondary Municipal Wastewater Treatment: Pilot-Plant Demonstration of the UASB/Aerobic Solids Contact System — Enrique J. La Motta, Eudomar Silva, Adriana Bustillos, Harold Padrón, and Jackeline Luque; 133 (4), 397-403 (2007).

Nitrogen Removal in Recirculating Sand Filter Systems with Upflow Anaerobic Components — Michael A. Urynowicz, William C. Boyle, Marjorie E. Bedessem, and Song Jin; 133 (5), 464-70 (2007).

Evaluation of Input Variables in Adaptive-Network-Based Fuzzy Inference System Modeling for an Anaerobic Wastewater Treatment Plant under Unsteady State — Altunay Perendeci, Sever Arslan, Abdurrahman Tanyolaç, and Serdar S. Çelebi; 133 (7), 765-71 (2007).

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GIS Approach of Delineation and Risk Assessment of Areas Affected by Arsenic Pollution in Drinking Water — Sukha Ranjan Samadder and Chillara Subbarao; 133 (7), 742-9 (2007).

Arsenic Removal by a Colloidal Iron Oxide Coated Sand — Ilwon Ko, Allen P. Davis, Ju-Yong Kim, and Kyoung-Woong Kim; 133 (9), 891-8 (2007).

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Isolation and Characterization of NP4, Arsenate-Reducing *Sulfurospirillum*, from Maine Groundwater — Jean D. MacRae, Ingrid N. Lavine, Kevin A. McCaffery, and Krista Ricupero; 133 (1), 81-8 (2007).

Fluid Dynamics Impact on Bacterial Physiology: Biochemical Oxygen Demand — Amer Al-Homoud, Miki Hondzo, and Timothy LaPara; 133 (2), 226-36 (2007).

Arsenite Oxidation by *Alcaligenes Faecalis* Strain O1201 in a Continuous-Flow Bioreactor — Yi-Tin Wang and Arthon Suttigarn; 133 (5), 471-6 (2007).

Use of Recombinant Bioluminescent Bacteria for On-Site Monitoring of Toluene Analogs at Petroleum Contaminated Sites — I. C. Kong, M. Kim, K. S. Ko, J. G. Kim, C. W. Jeon, and A. Bhandari; 133 (7), 772-6 (2007).

Total Coliform Survival Characteristics in Frozen Soils — Hrishikesh Adhikari, David L. Barnes, Silke Schiewer, and Daniel M. White; 133 (12), 1098-105 (2007).

Spatial Variation of Sediment Sulfate Reduction Rates in a Saline Lake — Joe D. Manous, Charles J. Gantzer, and Heinz G. Stefan; 133 (12), 1106-16 (2007).

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Pretreatment of Highly Polluted Pharmaceutical Waste Broth by Wet Air Oxidation — Andreja Žgajnar Gotvajn, Jana Zagorc-Končan, and Tatjana Tišler; 133 (1), 89-94 (2007).

Using the Kinetics of Biological Flocculation and the Limiting Flux Theory for the Preliminary Design of Activated Sludge Systems. II: Experimental Verification — Enrique J. La Motta, José A. Rojas, and J. Alex McCorquodale; 133 (1), 111-6 (2007).

Nitric Oxide Emission and Soil Microbial Activities in Toluene Contaminated Soil — Ki Don Cho and J. Jeffrey Peirce; 133 (2), 237-44 (2007).

Liquid Sodium Ferrate and Fenton's Reagent for Treatment of Mature Landfill Leachate — Eyad S. Batarseh, Debra R. Reinhart, and Luke Daly; 133 (11), 1042-50 (2007).

Biofilm

Biodegradation of PCE in a Hybrid Membrane Aerated Biofilm Reactor — Dieudonné-Guy Ohandja and David C. Stuckey; 133 (1), 20-7 (2007).

Evaluation for Biological Reduction of Nitrate and Perchlorate in Brine Water Using the Hydrogen-Based Membrane Biofilm Reactor — Jinwook Chung, Robert Nerenberg, and Bruce E. Rittmann; 133 (2), 157-64 (2007).

Single-Submerged Attached Growth Bioreactor for Simultaneous Removal of Organics and Nitrogen — P. B. Pedros, J. Y. Wang, and H. Metghalchi; 133 (2), 191-7 (2007).

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Effect of Biofilm Formation on Roughness Coefficient and Solids Deposition in Small-Diameter PVC Sewer Pipes — Karloren Guzmán, Enrique J. La Motta, J. Alex McCorquodale, Soli Rojas, and Maria Ermogenous; 133 (4), 364-71 (2007).

Horizontal-Flow Biofilm System with Step Feed for Nitrogen Removal — M. Rodgers, L. W. Xiao, and J. Mulqueen; 133 (6), 569-74 (2007).

Comparison of Ion-Selective and Carbon Fiber Mercury Film Microelectrodes for Cadmium Measurement -- Peng Jin and Paul L. Bishop; 133 (6), 608-15 (2007).

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Using the Kinetics of Biological Flocculation and the Limiting Flux Theory for the Preliminary Design of Activated Sludge Systems. I: Model Development — Enrique J. La Motta, J. Alex McCorquodale, and José A. Rojas; 133 (1), 104-10 (2007).

Evaluation for Biological Reduction of Nitrate and Perchlorate in Brine Water Using the Hydrogen-Based Membrane Biofilm Reactor — Jinwook Chung, Robert Nerenberg, and Bruce E. Rittmann; 133 (2), 157-64 (2007).

2,4,6 Tri-Chlorophenol Containing Wastewater Treatment Using a Hybrid-Loop Bioreactor System — Serkan Eker and Fikret Kargi; 133 (3), 340-5 (2007).

Hybrid-Hollow-Fiber Membrane Bioreactor for Cometabolic Transformation of 4-Chlorophenol in the Presence of Phenol — Yi Li and Kai-Chee Loh; 133 (4), 404-10 (2007).

Horizontal-Flow Biofilm System with Step Feed for Nitrogen Removal — M. Rodgers, L. W. Xiao, and J. Mulqueen; 133 (6), 569-74 (2007).

Tracer Studies in a Laboratory Beach Subjected to Waves — Michel C. Boufadel, Hailong Li, Makram T. Suidan, and Albert D. Venosa; 133 (7), 722-32 (2007).

Kinetics of Phosphorus Release and Uptake in a Membrane-Assisted Biological Phosphorus Removal Process — Alessandro Monti, Eric R. Hall, and Mark M. C. van Loosdrecht; 133 (9), 899-908 (2007).

Enhanced Biological Phosphorus Removal Performance and Microbial Population Changes at High Organic Loading Rates — Chang Hoon Ahn, Hee-Deung Park, and Jae Kwang Park; 133 (10), 962-9 (2007).

Evolutionary Multivariate Dynamic Process Model Induction for a Biological Nutrient Removal Process — Yoon-Seok Timothy Hong and Byeong-Cheon Paik; 133 (12), 1126-35 (2007).

Biomass

Eutrophication Model for the Patuxent Estuary: Advances in Predictive Capabilities — Wu-Seng Lung and Alex J. Nice; 133 (9), 917-30 (2007).

Brines

Evaluation for Biological Reduction of Nitrate and Perchlorate in Brine Water Using the Hydrogen-Based Membrane Biofilm Reactor — Jinwook Chung, Robert Nerenberg, and Bruce E. Rittmann; 133 (2), 157-64 (2007).

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Calibration of a Continuous Simulation Fecal Coliform Model Based on Historical Data Analysis — Gemma Manache, Charles S. Melching, and Richard Lanyon; 133 (7), 681-91 (2007).

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Evaluation of Hypolimnetic Oxygen Demand in a Large Eutrophic Raw Water Reservoir, San Vicente Reservoir, Calif. — Marc Beutel, Imad Hannoun, Jeff Pasek, and Kristen Bowman Kavanagh; 133 (2), 130-8 (2007).

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Evaluation of Antimicrobial Coatings for Cloth Media Filtration: Case Study — Olivia M. Virgadamo, Lloyd Johnson, and Jeannie L. Darby; 133 (1), 117-20 (2007).

Cement

XRD and Unconfined Compressive Strength Study for a Qualitative Examination of Calcium–Arsenic Compounds Retardation of Cement Hydration in Solidified/Stabilized Arsenic–Iron Hydroxide Sludge — Tanapon Phenrat, Taha F. Marhaba, and Manaskorn Rachakornkij; 133 (6), 595-607 (2007).

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Arsenic Removal by a Colloidal Iron Oxide Coated Sand — Ilwon Ko, Allen P. Davis, Ju-Yong Kim, and Kyoung-Woong Kim; 133 (9), 891-8 (2007).

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Liquid Sodium Ferrate and Fenton's Reagent for Treatment of Mature Landfill Leachate — Eyad S. Batarseh, Debra R. Reinhart, and Luke Daly; 133 (11), 1042-50 (2007).

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Calibration of a Continuous Simulation Fecal Coliform Model Based on Historical Data Analysis — Gemma Manache, Charles S. Melching, and Richard Lanyon; 133 (7), 681-91 (2007).

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Genetic Algorithm Solution of a Gray Nonlinear Water Environment Management Model Developed for the Liming River in Daqing, China — Dezhi Sun and Wei Yang; 133 (3), 287-93 (2007).

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Quaternized Poly(4-Vinylpyridine) Coated Activated Carbon: Diffusion Controlled Sorption of Chromium(VI) — Dianchen Gang, Ravi K. Kadari, and Baolin Deng; 133 (8), 834-8 (2007).

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timize Pollutant Removal — Joo-Hyon Kang, Yingxia Li, Sim-Lin Lau, Masoud Kayhanian, and Michael K. Stenstrom; 133 (4), 426-34 (2007).

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Genetic Algorithm Solution of a Gray Nonlinear Water Environment Management Model Developed for the Liming River in Daqing, China — Dezhi Sun and Wei Yang; 133 (3), 287-93 (2007).

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Numerical Method to Elucidate Likely Target Positions of Chlorine Removal in Anaerobic Sediments Undergoing Polychlorinated Biphenyl Dechlorination — Sandra C. Karcher, Jeanne M. VanBriesen, and Mitchell J. Small; 133 (3), 278-86 (2007).

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Impact of Secondary Disinfectants on Copper Corrosion under Stagnation Conditions — S. Rahman, B. C. McDonald, and G. A. Gagnon; 133 (2), 180-5 (2007).

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Utility of LANDSAT-Derived Land Use Data for Estimating Storm-Water Pollutant Loads in an Urbanizing Area — Mi-Hyun Park, Irwin H. (Mel) Suffet, and Michael K. Stenstrom; 133 (2), 203-10 (2007).

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Parameter Evaluation and Performance Comparison of MSW Settlement Prediction Models in Various Landfill Types — Hyun I. Park, Borinara Park, Seung R. Lee, and Daejin Hwang; 133 (1), 64-72 (2007).

Decomposition of Aqueous 2,2,3,3-Tetra-Fluoro-Propanol by UV/O_3 Process — Ming-Shean Chou and Ken-Lin Chang; 133 (10), 979-86 (2007).

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Numerical Method to Elucidate Likely Target Positions of Chlorine Removal in Anaerobic Sediments Undergoing Polychlorinated Biphenyl Dechlorination — Sandra C. Karcher, Jeanne M. VanBriesen, and Mitchell J. Small; 133 (3), 278-86 (2007).

Photochemical Degradation of 2,4,6-Trichlorophenol in the Presence of a Nonionic Surfactant: pH Control on Reaction Kinetics — Wing-Ki Choy, Wei Chu, and Chek-Yan Kwan; 133 (6), 641-5 (2007).

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Adsorption and Abiotic Transformation of Methyl *tert*-Butyl Ether through Acidic Catalysts — Axel Fischer, Claudia Oehm, Michael Selle, and Peter Werner; 133 (8), 827-33 (2007).

Effects of Seepage Velocity and Temperature on the Dechlorination of Chlorinated Aliphatic Hydrocarbons — Keith C. K. Lai and Irene M. C. Lo; 133 (9), 859-68 (2007).

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Nitrogen Removal in Recirculating Sand Filter Systems with Upflow Anaerobic Components — Michael A. Urynowicz, William C. Boyle, Marjorie E. Bedessem, and Song Jin; 133 (5), 464-70 (2007).

Horizontal-Flow Biofilm System with Step Feed for Nitrogen Removal — M. Rodgers, L. W. Xiao, and J. Mulqueen; 133 (6), 569-74 (2007).

Kinetics of Phosphorus Release and Uptake in a Membrane-Assisted Biological Phosphorus Removal Process — Alessandro Monti, Eric R. Hall, and Mark M. C. van Loosdrecht; 133 (9), 899-908 (2007).

Strategy for Complete Nitrogen Removal in Bioreactor Landfills — Nicole D. Berge, Debra R. Reinhart, and Eyad S. Batarseh; 133 (12), 1117-25 (2007).

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Energy Audit, Solids Reduction, and Pathogen Inactivation in Secondary Sludges during Batch Thermophilic Aerobic Digestion Process — Mohsen Nosrati, T. R. Sreekrishnan, and S. N. Mukhopadhyay; 133 (5), 477-84 (2007).

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Diffusion
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Digestion
Energy Audit, Solids Reduction, and Pathogen Inactivation in Secondary Sludges during Batch Thermophilic Aerobic Digestion Process — Mohsen Nosrati, T. R. Sreekrishnan, and S. N. Mukhopadhyay; 133 (5), 477-84 (2007).

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Information Collection Rule Data Evaluation and Analysis to Support Impacts on Disinfection By-Product Formation — Alexa Obolensky, Philip C. Singer, and Hiba M. Shukairy; 133 (1), 53-63 (2007).

Inactivation of Adenovirus Types 2, 5, and 41 in Drinking Water by UV Light, Free Chlorine, and Monochloramine — Carole S. Baxter, Ron Hofmann, Michael R. Templeton, Martha Brown, and Robert C. Andrews; 133 (1), 95-103 (2007).

Impact of Secondary Disinfectants on Copper Corrosion under Stagnation Conditions — S. Rahman, B. C. McDonald, and G. A. Gagnon; 133 (2), 180-5 (2007).

Calibration of a Continuous Simulation Fecal Coliform Model Based on Historical Data Analysis — Gemma Manache, Charles S. Melching, and Richard Lanyon; 133 (7), 681-91 (2007).

Effects of Bromide Ion and Natural Organic Matter Fractions on the Formation and Speciation of Chlorination By-Products — Nuray Ates, Ulku Yetis, and Mehmet Kitis; 133 (10), 947-54 (2007).

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Using the Kinetics of Biological Flocculation and the Limiting Flux Theory for the Preliminary Design of Activated Sludge Systems. II: Experimental Verification — Enrique J. La Motta, José A. Rojas, and J. Alex McCorquodale; 133 (1), 111-6 (2007).

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Photochemical Degradation of 2,4,6-Trichlorophenol in the Presence of a Nonionic Surfactant: pH Control on Reaction Kinetics — Wing-Ki Choy, Wei Chu, and Chek-Yan Kwan; 133 (6), 641-5 (2007).

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Parameter Evaluation and Performance Comparison of MSW Settlement Prediction Models in Various Landfill Types — Hyun I. Park, Borinara Park, Seung R. Lee, and Daejin Hwang; 133 (1), 64-72 (2007).

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Liquid Sodium Ferrate and Fenton's Reagent for Treatment of Mature Landfill Leachate — Eyad S. Batarseh, Debra R. Reinhart, and Luke Daly; 133 (11), 1042-50 (2007).

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Retardation of Nonlinearly Sorbed Solutes in Porous Media — Munjed A. Maraqa; 133 (12), 1080-7 (2007).

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Use of Recombinant Bioluminescent Bacteria for On-Site Monitoring of Toluene Analogs at Petroleum Contaminated Sites — I. C. Kong, M. Kim, K. S. Ko, J. G. Kim, C. W. Jeon, and A. Bhandari; 133 (7), 772-6 (2007).

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Replacing Outliers and Missing Values from Activated Sludge Data Using Kohonen Self-Organizing Map — Rabee Rustum and Adebayo J. Adeloye; 133 (9), 909-16 (2007).

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Evaluation for Biological Reduction of Nitrate and Perchlorate in Brine Water Using the Hydrogen-Based Membrane Biofilm Reactor — Jinwook Chung, Robert Nerenberg, and Bruce E. Rittmann; 133 (2), 157-64 (2007).

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Horizontal-Flow Biofilm System with Step Feed for Nitrogen Removal — M. Rodgers, L. W. Xiao, and J. Mulqueen; 133 (6), 569-74 (2007).

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Real-Time Detection of Sanitary Sewer Overflows Using Neural Networks and Time Series Analysis — Derya Sumer, Javier Gonzalez, and Kevin Lansey; 133 (4), 353-63 (2007).

Remediation of TCE-Contaminated Groundwater in a Sandy Aquifer Using Pulsed Air Sparging: Laboratory and Numerical Studies — Hun-Mi Kim, Yunjung Hyun, and Kang-Kun Lee; 133 (4), 380-8 (2007).

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Pollutant Mass Flushing Characterization of Highway Stormwater Runoff from an Ultra-Urban Area — Kelly R. Flint and Allen P. Davis; 133 (6), 616-26 (2007).

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Eutrophication Model for the Patuxent Estuary: Advances in Predictive Capabilities — Wu-Seng Lung and Alex J. Nice; 133 (9), 917-30 (2007).

Evolutionary Multivariate Dynamic Process Model Induction for a Biological Nutrient Removal Process — Yoon-Seok Timothy Hong and Byeong-Cheon Paik; 133 (12), 1126-35 (2007).

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Drinking Water Treatment Plant Design Incorporating Variability and Uncertainty — Dominic L. Boccelli, Mitchell J. Small, and Urmila M. Diwekar; 133 (3), 303-12 (2007).

Optimal Design of Level 1 Redundant Water Distribution Networks Considering Nodal Storage — Magan Lal Agrawal, Rajesh Gupta, and Pramod R. Bhave; 133 (3), 319-30 (2007).

Particle Destabilization in Highway Runoff to Optimize Pollutant Removal — Joo-Hyon Kang, Yingxia Li, Sim-Lin Lau, Masoud Kayhanian, and Michael K. Stenstrom; 133 (4), 426-34 (2007).

Equilibrium versus Nonequilibrium Treatment Modeling in the Optimal Design of Pump-and-Treat Groundwater Remediation Systems — Karen L. Endres, Alex Mayer, and David W. Hand; 133 (8), 809-18 (2007).

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Retarded Transport and Accumulation of Soluble Microbial Products in a Membrane Bioreactor — Lianfa Song, Shuang Liang, and Liangyong Yuan; 133 (1), 36-43 (2007).

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Liquid Sodium Ferrate and Fenton's Reagent for Treatment of Mature Landfill Leachate — Eyad S. Batarseh, Debra R. Reinhart, and Luke Daly; 133 (11), 1042-50 (2007).

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Isolation and Characterization of NP4, Arsenate-Reducing *Sulfurospirillum*, from Maine Groundwater — Jean D. MacRae, Ingrid N. Lavine, Kevin A. McCaffery, and Krista Ricupero; 133 (1), 81-8 (2007).

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Single-Submerged Attached Growth Bioreactor for Simultaneous Removal of Organics and Nitrogen — P. B. Pedros, J. Y. Wang, and H. Metghalchi; 133 (2), 191-7 (2007).

Chemical-Enhanced Washing for Remediation of Soils Contaminated with Marine Diesel Fuel in the Presence/Absence of Pb — Weihua Zhang and Irene M. C. Lo; 133 (5), 548-55 (2007).

Effects of Bromide Ion and Natural Organic Matter Fractions on the Formation and Speciation of Chlorination By-Products — Nuray Ates, Ulku Yetis, and Mehmet Kitis; 133 (10), 947-54 (2007).

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Enhanced Biological Phosphorus Removal Performance and Microbial Population Changes at High Organic Loading Rates — Chang Hoon Ahn, Hee-Deung Park, and Jae Kwang Park; 133 (10), 962-9 (2007).

Total Coliform Survival Characteristics in Frozen Soils — Hrishikesh Adhikari, David L. Barnes, Silke Schiewer, and Daniel M. White; 133 (12), 1098-105 (2007).

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Arsenite Oxidation by *Alcaligenes Faecalis* Strain O1201 in a Continuous-Flow Bioreactor — Yi-Tin Wang and Arthon Suttigarn; 133 (5), 471-6 (2007).

Remediation of Contaminated Soils with PCBs Using an Integrated Treatment: Desorption and Oxidation — A. Riaza-Frutos, J. M. Quiroga, and M. A. Manzano; 133 (5), 541-7 (2007).

Effects of Iron on Chemical Sulfide Oxidation in Wastewater from Sewer Networks — Asbjørn Haaning Nielsen, Thorkild Hvitved-Jacobsen, and Jes Vollertsen; 133 (6), 655-8 (2007).

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Size Distributions and Light Scattering Features of Minerogenic Particles in a Stream during Runoff Events — Steven W. Effler, Feng Peng, and Rakesh K. Gelda; 133 (9), 931-40 (2007).

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Hybrid-Hollow-Fiber Membrane Bioreactor for Cometabolic Transformation of 4-Chlorophenol in the Presence of Phenol — Yi Li and Kai-Chee Loh; 133 (4), 404-10 (2007).

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Enhanced Biological Phosphorus Removal Performance and Microbial Population Changes at High Organic Loading Rates — Chang Hoon Ahn, Hee-Deung Park, and Jae Kwang Park; 133 (10), 962-9 (2007).

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Retardation of Nonlinearly Sorbed Solutes in Porous Media — Munjed A. Maraqa; 133 (6), 587-94 (2007).

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GIS Approach of Delineation and Risk Assessment of Areas Affected by Arsenic Pollution in Drinking Water — Sukha Ranjan Samadder and Chillara Subbarao; 133 (7), 742-9 (2007).

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Activated Carbon Addition to a Submerged Anaerobic Membrane Bioreactor: Effect on Performance, Transmembrane Pressure, and Flux — Alan Y. Hu and David C. Stuckey; 133 (1), 73-80 (2007).

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Cost and Land Functions for Wastewater Treatment Projects: Typical Simple Linear Regression versus Fuzzy Linear Regression — Basil Papadopoulos, Konstantinos P. Tsagarakis, and Andreas Yannopoulos; 133 (6), 581-6 (2007).

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Utility of LANDSAT-Derived Land Use Data for Estimating Storm-Water Pollutant Loads in an Urbanizing Area — Mi-Hyun Park, Irwin H. (Mel) Suffet, and Michael K. Stenstrom; 133 (2), 203-10 (2007).

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Development of Refined BOD and DO Models for Highly Polluted Kali River in India — Ramakar Jha, C. S. P. Ojha, and K. K. S. Bhatia; 133 (8), 839-52 (2007).

Dissolved Oxygen Downstream of an Effluent Outfall in an Ice-Covered River: Natural and Artificial Aeration — Iran E. Lima Neto, David Z. Zhu, Nallamuthu Rajaratnam, Tong Yu, Mark Spafford, and Preston McEachern; 133 (11), 1051-60 (2007).

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Robotic Monitoring to Assess Impacts of Zebra Mussels and Assimilative Capacity for a River — Joseph S. Denkenberger, David M. O'Donnell, Charles T. Driscoll, and Steven W. Effler; 133 (5), 498-506 (2007).

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Pesticide Runoff Loads from Lawns and Golf Courses — Douglas A. Haith and Matthew W. Duffany; 133 (4), 435-46 (2007).

Pollutant Mass Flushing Characterization of Highway Stormwater Runoff from an Ultra-Urban Area — Kelly R. Flint and Allen P. Davis; 133 (6), 616-26 (2007).

Size Distributions and Light Scattering Features of Minerogenic Particles in a Stream during Runoff Events — Steven W. Effler, Feng Peng, and Rakesh K. Gelda; 133 (9), 931-40 (2007).

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Enhanced Sand Filtration for Storm Water Phosphorus Removal — Andrew J. Erickson, John S. Gulliver, and Peter T. Weiss; 133 (5), 485-97 (2007).

Arsenic Removal by a Colloidal Iron Oxide Coated Sand — Ilwon Ko, Allen P. Davis, Ju-Yong Kim, and Kyoung-Woong Kim; 133 (9), 891-8 (2007).

Predicting Air Permeability in Undisturbed, Subsurface Sandy Soils from Air-Filled Porosity — Tjalfe G. Poulsen, Per Moldrup, Anne Thorbjørn, and Per Schjønning; 133 (10), 995-1001 (2007).

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Bench-Scale Testing of Nanofiltration for Seawater Desalination — Catherine J. Harrison, Yann A. Le Gouellec, Robert C. Cheng, and Amy E. Childress; 133 (11), 1004-14 (2007).

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Eutrophication Model for the Patuxent Estuary: Advances in Predictive Capabilities — Wu-Seng Lung and Alex J. Nice; 133 (9), 917-30 (2007).

Spatial Variation of Sediment Sulfate Reduction Rates in a Saline Lake — Joe D. Manous, Charles J. Gantzer, and Heinz G. Stefan; 133 (12), 1106-16 (2007).

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Effects of Seepage Velocity and Temperature on the Dechlorination of Chlorinated Aliphatic Hydrocarbons — Keith C. K. Lai and Irene M. C. Lo; 133 (9), 859-68 (2007).

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Aquatic Assessment of the Chernobyl Nuclear Accident and Its Remediation — Y. Onishi, S. L. Kivva, M. J. Zheleznyak, and O. V. Voitsekhovich; 133 (11), 1015-23 (2007).

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Plastics Waste Processing: Comminution Size Distribution and Prediction — L. J. Jekel and E. K. L. Tam; 133 (2), 245-54 (2007).

Particle Characterization and Settling Velocities for a Water Supply Reservoir during a Turbidity Event — MaryGail Perkins, Steven W. Effler, Feng Peng, Donald Pierson, David G. Smith, and Yogesh C. Agrawal; 133 (8), 800-8 (2007).

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Adsorption and Precoat Filtration Studies of Synthetic Dye Removal by Acid Mine Drainage Sludge — Xinchao Wei and Roger C. Viadero; 133 (6), 633-40 (2007).

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Off-Site Exposure to Respirable Aerosols Produced during the Disk-Incorporation of Class B Biosolids — Swee Yang Low, Tania Paez-Rubio, Carolina Baertsch, Matthew Kucharski, and Jordan Peccia; 133 (10), 987-94 (2007).

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Chemical-Enhanced Washing for Remediation of Soils Contaminated with Marine Diesel Fuel in the Presence/Absence of Pb — Weihua Zhang and Irene M. C. Lo; 133 (5), 548-55 (2007).

Temporal Moment Analysis for Volatile Organic Compounds in Dual-Porosity Porous Media: Loss Fractions and Effective Parameters — Rishi Parashar, Rao S. Govindaraju, and Mohammed M. Hantush; 133 (9), 879-90 (2007).

Predicting Air Permeability in Undisturbed, Subsurface Sandy Soils from Air-Filled Porosity — Tjalfe G. Poulsen, Per Moldrup, Anne Thorbjørn, and Per Schjønning; 133 (10), 995-1001 (2007).

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Effect of the Composition of Anodic Purging Solutions on Electroosmosis — Songhu Yuan, Meng Tian, Taiping Li, and Xiaohua Lu; 133 (6), 627-32 (2007).

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Parameter Evaluation and Performance Comparison of MSW Settlement Prediction Models in Various Landfill Types — Hyun I. Park, Borinara Park, Seung R. Lee, and Daejin Hwang; 133 (1), 64-72 (2007).

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Quaternized Poly(4-Vinylpyridine) Coated Activated Carbon: Diffusion Controlled Sorption of Chromium(VI) — Dianchen Gang, Ravi K. Kadari, and Baolin Deng; 133 (8), 834-8 (2007).

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Enhanced Sand Filtration for Storm Water Phosphorus Removal — Andrew J. Erickson, John S. Gulliver, and Peter T. Weiss; 133 (5), 485-97 (2007).

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Impacts of Hydrophilic Membrane Additives on the Ultrafiltration of River Water — Anh H. Nguyen, Roberto M. Narbaitz, and Takeshi Matsuura; 133 (5), 515-22 (2007).

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Impacts of Hydrophilic Membrane Additives on the Ultrafiltration of River Water — Anh H. Nguyen, Roberto M. Narbaitz, and Takeshi Matsuura; 133 (5), 515-22 (2007).

Chemical-Enhanced Washing for Remediation of Soils Contaminated with Marine Diesel Fuel in the Presence/Absence of Pb — Weihua Zhang and Irene M. C. Lo; 133 (5), 548-55 (2007).

Photochemical Degradation of 2,4,6-Trichlorophenol in the Presence of a Nonionic Surfactant: pH Control on Reaction Kinetics — Wing-Ki Choy, Wei Chu, and Chek-Yan Kwan; 133 (6), 641-5 (2007).

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Pollutant Mass Flushing Characterization of Highway Stormwater Runoff from an Ultra-Urban Area — Kelly R. Flint and Allen P. Davis; 133 (6), 616-26 (2007).

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Nitrogen Removal in Recirculating Sand Filter Systems with Upflow Anaerobic Components — Michael A. Urynowicz, William C. Boyle, Marjorie E. Bedessem, and Song Jin; 133 (5), 464-70 (2007).

Effects of Seepage Velocity and Temperature on the Dechlorination of Chlorinated Aliphatic

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Pretreatment of Highly Polluted Pharmaceutical Waste Broth by Wet Air Oxidation — Andreja Žgajnar Gotvajn, Jana Zagorc-Končan, and Tatjana Tišler; 133 (1), 89-94 (2007).

2,4,6 Tri-Chlorophenol Containing Wastewater Treatment Using a Hybrid-Loop Bioreactor System — Serkan Eker and Fikret Kargi; 133 (3), 340-5 (2007).

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Tracer Studies in a Laboratory Beach Subjected to Waves — Michel C. Boufadel, Hailong Li, Makram T. Suidan, and Albert D. Venosa; 133 (7), 722-32 (2007).

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Hybrid-Hollow-Fiber Membrane Bioreactor for Cometabolic Transformation of 4-Chlorophenol in the Presence of Phenol — Yi Li and Kai-Chee Loh; 133 (4), 404-10 (2007).

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Tropical Soils–Acid Mine Drainage Interactions: Breakthrough Curves and Some Transport Parameters — Eric M. Frempong and Ernest K. Yanful; 133 (7), 733-41 (2007).

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Fluid Dynamics Impact on Bacterial Physiology: Biochemical Oxygen Demand — Amer Al-Homoud, Miki Hondzo, and Timothy LaPara; 133 (2), 226-36 (2007).

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Inactivation of Adenovirus Types 2, 5, and 41 in Drinking Water by UV Light, Free Chlorine, and Monochloramine — Carole S. Baxter, Ron Hofmann, Michael R. Templeton, Martha Brown, and Robert C. Andrews; 133 (1), 95-103 (2007).

Buchberger, Steven G.

Effect of Media Grain Shape on Particle Straining during Filtration — John M. H. Barton and Steven G. Buchberger; 133 (2), 211-9 (2007).

Bustillos, Adriana

Combined Anaerobic/Aerobic Secondary Municipal Wastewater Treatment: Pilot-Plant Demonstration of the UASB/Aerobic Solids Contact System — Enrique J. La Motta, Eudomar Silva, Adriana Bustillos, Harold Padrón, and Jackeline Luque; 133 (4), 397-403 (2007).

Butalia, Tarunjit

Beneficial Reuse of FGD Material in the Construction of Low Permeability Liners: Impacts on Inorganic Water Quality Constituents — Chin-Min Cheng, Wei Tu, Behrad Zand, Tarunjit Butalia, William Wolfe, and Harold Walker; 133 (5), 523-31 (2007).

Carter, Stephen

Closure to "Integrated Hydrodynamic and Water Quality Modeling System to Support Nutrient Total Maximum Daily Load Development for Wissahickon Creek, Pennsylvania" by Rui Zou, Stephen Carter, Leslie Shoemaker, Andrew Parker, and Thomas Henry — Rui Zou, Stephen Carter, Leslie Shoemaker, Andrew Parker, and Thomas Henry; 133 (11), 1073-4 (2007).

Cath, Tzahi Y.

Evaluation of Membrane Processes for Reducing Total Dissolved Solids Discharged to the Truckee River — Eric R. Mortensen, Tzahi Y. Cath, Jonathan A. Brant, Keith E. Dennett, and Amy E. Childress; 133 (12), 1136-44 (2007).

Çelebi, Serdar S.

Evaluation of Input Variables in Adaptive-Network-Based Fuzzy Inference System Modeling for an Anaerobic Wastewater Treatment Plant under Unsteady State — Altunay Perendeci, Sever Arslan, Abdurrahman Tanyolaç, and Serdar S. Çelebi; 133 (7), 765-71 (2007).

Chang, Chang-Tang

Prevention Efficiencies of Woven Straw to Reduce PM_{10} Emissions from Exposed Area — Yu-Min Chang, Kuo-Tung Su, Chien-Chung Liu, Shiao-Shing Chen, and Chang-Tang Chang; 133 (12), 1153-61 (2007).

Chang, Ken-Lin

Decomposition of Aqueous 2,2,3,3-Tetra-Fluoro-Propanol by UV/O_3 Process — Ming-Shean Chou and Ken-Lin Chang; 133 (10), 979-86 (2007).

Chang, M. F.

Precipitation Removal of Fluoride from Semiconductor Wastewater — M. F. Chang and J. C. Liu; 133 (4), 419-25 (2007).

Chang, Yu-Min

Prevention Efficiencies of Woven Straw to Reduce PM_{10} Emissions from Exposed Area — Yu-Min Chang, Kuo-Tung Su, Chien-Chung Liu, Shiao-Shing Chen, and Chang-Tang Chang; 133 (12), 1153-61 (2007).

Chen, Shiao-Shing

Prevention Efficiencies of Woven Straw to Reduce PM_{10} Emissions from Exposed Area — Yu-Min Chang, Kuo-Tung Su, Chien-Chung Liu, Shiao-Shing Chen, and Chang-Tang Chang; 133 (12), 1153-61 (2007).

Chen, Yue Hua

Potential for 17β-Estradiol and Estrone Degradation in a Recharge Aquifer System — Tok Hoon Lim, Karina Yew Hoong Gin, San San Chow, Yue Hua Chen, Martin Reinhard, and Joo Hwa Tay; 133 (8), 819-26 (2007).

Cheng, Chin-Min

Beneficial Reuse of FGD Material in the Construction of Low Permeability Liners: Impacts on Inorganic Water Quality Constituents — Chin-Min Cheng, Wei Tu, Behrad Zand, Tarunjit Butalia, William Wolfe, and Harold Walker; 133 (5), 523-31 (2007).

Cheng, Robert C.

Bench-Scale Testing of Nanofiltration for Seawater Desalination — Catherine J. Harrison, Yann A. Le Gouellec, Robert C. Cheng, and Amy E. Childress; 133 (11), 1004-14 (2007).

Childress, Amy E.

Bench-Scale Testing of Nanofiltration for Seawater Desalination — Catherine J. Harrison, Yann A. Le Gouellec, Robert C. Cheng, and Amy E. Childress; 133 (11), 1004-14 (2007).

Evaluation of Membrane Processes for Reducing Total Dissolved Solids Discharged to the Truckee River — Eric R. Mortensen, Tzahi Y. Cath, Jonathan A. Brant, Keith E. Dennett, and Amy E. Childress; 133 (12), 1136-44 (2007).

Cho, Ki Don

Nitric Oxide Emission and Soil Microbial Activities in Toluene Contaminated Soil — Ki Don Cho and J. Jeffrey Peirce; 133 (2), 237-44 (2007).

Chou, Ming-Shean

Decomposition of Aqueous 2,2,3,3-Tetra-Fluoro-Propanol by UV/O_3 Process — Ming-Shean Chou and Ken-Lin Chang; 133 (10), 979-86 (2007).

Chow, San San

Potential for 17β-Estradiol and Estrone Degradation in a Recharge Aquifer System — Tok Hoon Lim, Karina Yew Hoong Gin, San San Chow, Yue Hua Chen, Martin Reinhard, and Joo Hwa Tay; 133 (8), 819-26 (2007).

Chowdhury, Nabin

Biohydrogen Production by Mesophilic Anaerobic Fermentation of Glucose in the Presence of Linoleic Acid — Nabin Chowdhury, Jerald A. Lalman, Rajesh Seth, and Pius Ndegwa; 133 (12), 1145-52 (2007).

Choy, Wing-Ki

Photochemical Degradation of 2,4,6-Trichlorophenol in the Presence of a Nonionic Surfactant: pH Control on Reaction Kinetics — Wing-Ki Choy, Wei Chu, and Chek-Yan Kwan; 133 (6), 641-5 (2007).

Chu, Wei

Photochemical Degradation of 2,4,6-Trichlorophenol in the Presence of a Nonionic Surfactant: pH Control on Reaction Kinetics — Wing-Ki Choy, Wei Chu, and Chek-Yan Kwan; 133 (6), 641-5 (2007).

Chung, Gunhui

Steady-State Water Quality Analysis for Pipe Network Systems — Gunhui Chung, Kevin E. Lansey, and Paul F. Boulos; 133 (7), 777-82 (2007).

Chung, Jinwook

Evaluation for Biological Reduction of Nitrate and Perchlorate in Brine Water Using the Hydrogen-Based Membrane Biofilm Reactor — Jinwook Chung, Robert Nerenberg, and Bruce E. Rittmann; 133 (2), 157-64 (2007).

Clesceri, Nicholas L.

Discussion of "Landfill Settlement with Decomposition and Gas Generation" by Ertan Durmusoglu, M. Yavuz Corapcioglu, and Kagan Tuncay — Percival A. Miller and Nicholas L. Clesceri; 133 (7), 783-4 (2007).

Corapcioglu, M. Yavuz

Closure to "Landfill Settlement with Decomposition and Gas Generation" by Ertan Durmusoglu, M. Yavuz Corapcioglu, and Kagan Tuncay — Ertan Durmusoglu, M. Yavuz Corapcioglu, and Kagan Tuncay; 133 (7), 785 (2007).

Cruz, Jason E.

Discussion of "Integrated Hydrodynamic and Water Quality Modeling System to Support Nutrient Total Maximum Daily Load Development for Wissahickon Creek, Pennsylvania" by Rui Zou, Stephen Carter, Leslie Shoemaker, Andrew Parker, and Thomas Henry — R. Dwayne Myers, Jason E. Cruz, James T. Smullen, and Mark Maimone; 133 (11), 1072-3 (2007).

Cutler, Lynn M.

Rates of Trace Mineral-Catalyzed Decomposition of Hydrogen Peroxide — Amy L. Teel, Dennis D. Finn, Jeremy T. Schmidt, Lynn M. Cutler, and Richard J. Watts; 133 (8), 853-8 (2007).

da Conceição Cunha, Maria
Robust Optimal Design of Activated Sludge Bioreactors — Pedro Madeira Afonso and Maria da Conceição Cunha; 133 (1), 44-52 (2007).
Daigger, Glen T.
Wastewater Management in the 21st Century — Glen T. Daigger; 133 (7), 671-80 (2007).
Daly, Luke
Liquid Sodium Ferrate and Fenton's Reagent for Treatment of Mature Landfill Leachate — Eyad S. Batarseh, Debra R. Reinhart, and Luke Daly; 133 (11), 1042-50 (2007).
Darby, Jeannie L.
Evaluation of Antimicrobial Coatings for Cloth Media Filtration: Case Study — Olivia M. Virgadamo, Lloyd Johnson, and Jeannie L. Darby; 133 (1), 117-20 (2007).
Davis, Allen P.
Pollutant Mass Flushing Characterization of Highway Stormwater Runoff from an Ultra-Urban Area — Kelly R. Flint and Allen P. Davis; 133 (6), 616-26 (2007).
Arsenic Removal by a Colloidal Iron Oxide Coated Sand — Ilwon Ko, Allen P. Davis, Ju-Yong Kim, and Kyoung-Woong Kim; 133 (9), 891-8 (2007).
Deb, A. K.
A Tribute to Professor G. V. Loganathan — Arun K. Deb; 133 (8), 787-8 (2007).
Valve Distribution and Impact Analysis in Water Distribution Systems — Hwandon Jun, G. V. Loganathan, A. K. Deb, W. Grayman, and J. Snyder; 133 (8), 790-9 (2007).
Deng, Baolin
Quaternized Poly(4-Vinylpyridine) Coated Activated Carbon: Diffusion Controlled Sorption of Chromium(VI) — Dianchen Gang, Ravi K. Kadari, and Baolin Deng; 133 (8), 834-8 (2007).
Denkenberger, Joseph S.
Robotic Monitoring to Assess Impacts of Zebra Mussels and Assimilative Capacity for a River — Joseph S. Denkenberger, David M. O'Donnell, Charles T. Driscoll, and Steven W. Effler; 133 (5), 498-506 (2007).
Dennett, Keith E.
Evaluation of Membrane Processes for Reducing Total Dissolved Solids Discharged to the Truckee River — Eric R. Mortensen, Tzahi Y. Cath, Jonathan A. Brant, Keith E. Dennett, and Amy E. Childress; 133 (12), 1136-44 (2007).
Dietz, J. D.
Pilot-Scale Verification and Analysis of Iron Release Flux Model — G. Mutoti. J. D. Dietz, Syed A. Imran, N. Uddin, and J. S. Taylor; 133 (2), 173-9 (2007).
Dionysiou, Dionysios D.
In Situ Technologies for Reclamation of PCB-Contaminated Sediments: Current Challenges and Research Thrust Areas — Shirish Agarwal, Souhail R. Al-Abed, and Dionysios D. Dionysiou; 133 (12), 1075-8 (2007).
Diwekar, Urmila M.
Drinking Water Treatment Plant Design Incorporating Variability and Uncertainty — Dominic L. Boccelli, Mitchell J. Small, and Urmila M. Diwekar; 133 (3), 303-12 (2007).
Driscoll, Charles T.
Robotic Monitoring to Assess Impacts of Zebra Mussels and Assimilative Capacity for a River — Joseph S. Denkenberger, David M. O'Donnell, Charles T. Driscoll, and Steven W. Effler; 133 (5), 498-506 (2007).
Duffany, Matthew W.
Pesticide Runoff Loads from Lawns and Golf Courses — Douglas A. Haith and Matthew W. Duffany; 133 (4), 435-46 (2007).
Durmusoglu, Ertan
Closure to "Landfill Settlement with Decomposition and Gas Generation" by Ertan Durmusoglu, M. Yavuz Corapcioglu, and Kagan Tuncay — Ertan Durmusoglu, M. Yavuz Corapcioglu, and Kagan Tuncay; 133 (7), 785 (2007).
Ebtehaj, M.
Rule-Based Fuzzy System for Assessing Groundwater Vulnerability — A. Afshar, M. A. Mariño, M. Ebtehaj, and J. Moosavi; 133 (5), 532-40 (2007).
Echegoyen, Luis A.
Errata for "Iron-Mediated Aeration: Evaluation of Energy-Assisted Enhancement for In Situ Subsurface Remediation" by Daniel E. Meeroff, James D. Englehardt, Luis A. Echegoyen, and Tomoyuki Shibata — Daniel E. Meeroff, James D. Englehardt, Luis A. Echegoyen, and Tomoyuki Shibata; 133 (1), 125 (2007).
Economopoulos, Alexander P.
Comparative Fractional Efficiency Predictions by Selected Cyclone Simulation Models — Constantine Marinos, Alexia A. Economopoulou, and Alexander P. Economopoulos; 133 (5), 556-67 (2007).
Economopoulou, Alexia A.
Comparative Fractional Efficiency Predictions by Selected Cyclone Simulation Models — Constantine Marinos, Alexia A. Economopoulou, and Alexander P. Economopoulos; 133 (5), 556-67 (2007).
Edwards, Findlay G.
Mechanisms of Ballasted Floc Formation — Ana. V. Ghanem, James C. Young, and Findlay G. Edwards; 133 (3), 271-7 (2007).
Edwards, Marc
Boron Removal via Formation of Magnesium Silicate Solids during Precipitative Softening — Jeffrey L. Parks and Marc Edwards; 133 (2), 149-56 (2007).
Effler, Steven W.
Modeling Turbidity in a Water Supply Reservoir: Advancements and Issues — Rakesh K. Gelda and Steven W. Effler; 133 (2), 139-48 (2007).
Robotic Monitoring to Assess Impacts of Zebra Mussels and Assimilative Capacity for a River — Joseph S. Denkenberger, David M. O'Donnell, Charles T. Driscoll, and Steven W. Effler; 133 (5), 498-506 (2007).
Particle Characterization and Settling Velocities for a Water Supply Reservoir during a Turbidity Event — MaryGail Perkins, Steven W. Effler, Feng Peng, Donald Pierson, David G. Smith, and Yogesh C. Agrawal; 133 (8), 800-8 (2007).
Size Distributions and Light Scattering Features of Minerogenic Particles in a Stream during Runoff Events — Steven W. Effler, Feng Peng, and Rakesh K. Gelda; 133 (9), 931-40 (2007).
Eker, Serkan
2,4,6 Tri-Chlorophenol Containing Wastewater Treatment Using a Hybrid-Loop Bioreactor System — Serkan Eker and Fikret Kargi; 133 (3), 340-5 (2007).
Elmore, Andrew Curtis
Applying a One-Dimensional Mass Transport Model Using Groundwater Concentration Data — Andrew Curtis Elmore; 133 (4), 372-9 (2007).
Endres, Karen L.
Equilibrium versus Nonequilibrium Treatment Modeling in the Optimal Design of Pump-and-Treat Groundwater Remediation Systems — Karen L. Endres, Alex Mayer, and David W. Hand; 133 (8), 809-18 (2007).
Englehardt, James D.
Errata for "Iron-Mediated Aeration: Evaluation of Energy-Assisted Enhancement for In Situ Subsurface Remediation" by Daniel E. Meeroff, James D. Englehardt, Luis A. Echegoyen, and Tomoyuki Shibata — Daniel E. Meeroff, James D. Englehardt, Luis A. Echegoyen, and Tomoyuki Shibata; 133 (1), 125 (2007).
Erickson, Andrew J.
Enhanced Sand Filtration for Storm Water Phosphorus Removal — Andrew J. Erickson, John S. Gulliver, and Peter T. Weiss; 133 (5), 485-97 (2007).
Ermogenous, Maria
Effect of Biofilm Formation on Roughness Coefficient and Solids Deposition in Small-Diameter PVC Sewer Pipes — Karloren Guzmán, Enrique J. La Motta, J. Alex McCorquodale, Soli Rojas, and Maria Ermogenous; 133 (4), 364-71 (2007).
Evans, Derek A.
Phosphorus Treatment Capability of Marshland Upwelling System under High Background Salinity Conditions — Derek A. Evans and Kelly A. Rusch; 133 (11), 1061-71 (2007).
Fang, Haijun
Adsorption of Carbon Disulfide (CS_2) in Water by Different Types of Activated Carbon—Equilibrium, Dynamics, and Mathematical Modeling — Ji Yang, Juan Peng, Jinping Jia, and Haijun Fang; 133 (3), 294-302 (2007).
Ferrara, Raymond A.
Changing of the Guard — Raymond A. Ferrara; 133 (1), 1 (2007).
Editor's Note — Ray Ferrara; 133 (2), 127 (2007).
Editor's Note — Raymond A. Ferrara; 133 (5), 463 (2007).
Editor's Note — Raymond A. Ferrara; 133 (7), 670 (2007).
Editor's Note — Ray Ferrara; 133 (8), 789 (2007).
Editor's Note — Raymond A. Ferrara; 133 (11), 1003 (2007).
Editor's Note — Ray Ferrara; 133 (12), 1079 (2007).
Finn, Dennis D.
Rates of Trace Mineral-Catalyzed Decomposition of Hydrogen Peroxide — Amy L. Teel, Dennis D. Finn, Jeremy T. Schmidt, Lynn M. Cutler, and Richard J. Watts; 133 (8), 853-8 (2007).
Fischer, Axel
Adsorption and Abiotic Transformation of Methyl *tert*-Butyl Ether through Acidic Catalysts — Axel Fischer, Claudia Oehm, Michael Selle, and Peter Werner; 133 (8), 827-33 (2007).
Flint, Kelly R.
Pollutant Mass Flushing Characterization of Highway Stormwater Runoff from an Ultra-Urban Area — Kelly R. Flint and Allen P. Davis; 133 (6), 616-26 (2007).

Fox, Garey A.
Capture of Airborne Particulate Using Surface Applied Emulsions: Potential for Postdetonation Dirty Bomb Cleanup — Garey A. Fox, John W. Fuchs, Victor F. Medina, and Kaumudi Atapattu; 133 (3), 255-62 (2007).
Franco, Amaya
Enhanced Start-Up of Upflow Anaerobic Filters by Pulsation — Amaya Franco, Enrique Roca, and Juan M. Lema; 133 (2), 186-90 (2007).
Frempong, Eric M.
Tropical Soils–Acid Mine Drainage Interactions: Breakthrough Curves and Some Transport Parameters — Eric M. Frempong and Ernest K. Yanful; 133 (7), 733-41 (2007).
Fuchs, John W.
Capture of Airborne Particulate Using Surface Applied Emulsions: Potential for Postdetonation Dirty Bomb Cleanup — Garey A. Fox, John W. Fuchs, Victor F. Medina, and Kaumudi Atapattu; 133 (3), 255-62 (2007).
Gagnon, G. A.
Impact of Secondary Disinfectants on Copper Corrosion under Stagnation Conditions — S. Rahman, B. C. McDonald, and G. A. Gagnon; 133 (2), 180-5 (2007).
Gang, Dianchen
Quaternized Poly(4-Vinylpyridine) Coated Activated Carbon: Diffusion Controlled Sorption of Chromium(VI) — Dianchen Gang, Ravi K. Kadari, and Baolin Deng; 133 (8), 834-8 (2007).
Gantzer, Charles J.
Spatial Variation of Sediment Sulfate Reduction Rates in a Saline Lake — Joe D. Manous, Jr., Charles J. Gantzer, and Heinz G. Stefan; 133 (12), 1106-16 (2007).
Gelda, Rakesh K.
Modeling Turbidity in a Water Supply Reservoir: Advancements and Issues — Rakesh K. Gelda and Steven W. Effler; 133 (2), 139-48 (2007).
Size Distributions and Light Scattering Features of Minerogenic Particles in a Stream during Runoff Events — Steven W. Effler, Feng Peng, and Rakesh K. Gelda; 133 (9), 931-40 (2007).
Germaine, John T.
Contaminant Detection, Identification, and Quantification Using a Microchip Laser Fluorescence Sensor — Joseph V. Sinfield, Harold F. Hemond, John T. Germaine, Bernadette Johnson, and Jonathan Bloch; 133 (3), 346-51 (2007).
Ghanem, Ana. V.
Mechanisms of Ballasted Floc Formation — Ana. V. Ghanem, James C. Young, and Findlay G. Edwards; 133 (3), 271-7 (2007).
Gharaibeh, Ali
Mathematical Model to Predict Solids Content of Water Treatment Residuals during Drying — Ali Gharaibeh, Muttucumaru Sivakumar, and Dharmappa Hagare; 133 (2), 165-72 (2007).
Gin, Karina Yew Hoong
Potential for 17β-Estradiol and Estrone Degradation in a Recharge Aquifer System — Tok Hoon Lim, Karina Yew Hoong Gin, San San Chow, Yue Hua Chen, Martin Reinhard, and Joo Hwa Tay; 133 (8), 819-26 (2007).
Gonzalez, Javier
Real-Time Detection of Sanitary Sewer Overflows Using Neural Networks and Time Series Analysis — Derya Sumer, Javier Gonzalez, and Kevin Lansey; 133 (4), 353-63 (2007).
Gotvajn, Andreja Žgajnar
Pretreatment of Highly Polluted Pharmaceutical Waste Broth by Wet Air Oxidation — Andreja Žgajnar Gotvajn, Jana Zagorc-Končan, and Tatjana Tišler; 133 (1), 89-94 (2007).
Govindaraju, Rao S.
Temporal Moment Analysis for Volatile Organic Compounds in Dual-Porosity Porous Media: Loss Fractions and Effective Parameters — Rishi Parashar, Rao S. Govindaraju, and Mohammed M. Hantush; 133 (9), 879-90 (2007).
Graber, S. David
Full-Flowing Collection Conduits with Nonuniform Inflow — S. David Graber; 133 (6), 575-80 (2007).
Hydraulic Considerations in Geosynthetic and Aggregate Subsurface Drains — S. David Graber; 133 (9), 869-78 (2007).
Grayman, W.
Valve Distribution and Impact Analysis in Water Distribution Systems — Hwandon Jun, G. V. Loganathan, A. K. Deb, W. Grayman, and J. Snyder; 133 (8), 790-9 (2007).
Green, Michal
Modeling the Aeration Efficiency of a Passively Aerated Vertical-Flow Biological Filter — Yuval Alfiya, Michal Green, and Ori Lahav; 133 (10), 970-8 (2007).
Griborio, Alonso
Modeling a Retention Treatment Basin for CSO — J. Alex McCorquodale, Alonso Griborio, Jian-Guo Li, Harold Horneck, and Nihar Biswas; 133 (3), 263-70 (2007).
Gulliver, John S.
Enhanced Sand Filtration for Storm Water Phosphorus Removal — Andrew J. Erickson, John S. Gulliver, and Peter T. Weiss; 133 (5), 485-97 (2007).
Calibration and Validation of an Empirical Dissolved Oxygen Model — Omar I. Abdul-Aziz, Bruce N. Wilson, and John S. Gulliver; 133 (7), 698-710 (2007).
Guo, Qing-Xiang
Comparison of Liquid-Liquid Extraction System and Extraction-Evaporation System for High Concentrations of Phenolic Wastewater — Hong Jiang and Qing-Xiang Guo; 133 (2), 198-202 (2007).
Gupta, Rajesh
Optimal Design of Level 1 Redundant Water Distribution Networks Considering Nodal Storage — Magan Lal Agrawal, Rajesh Gupta, and Pramod R. Bhave; 133 (3), 319-30 (2007).
Gupta, S. K.
Dispersion Modeling of Leachates from Thermal Power Plants — Gurdeep Singh, S. K. Gupta, Ritesh Kumar, and M. Sunderarajan; 133 (12), 1088-97 (2007).
Guzmán, Karloren
Effect of Biofilm Formation on Roughness Coefficient and Solids Deposition in Small-Diameter PVC Sewer Pipes — Karloren Guzmán, Enrique J. La Motta, J. Alex McCorquodale, Soli Rojas, and Maria Ermogenous; 133 (4), 364-71 (2007).
Haarstad, K.
Electrical Conductivity and Chloride Reduction in Leachate Treatment Systems — K. Haarstad and T. Mæhlum; 133 (6), 659-64 (2007).
Hagare, Dharmappa
Mathematical Model to Predict Solids Content of Water Treatment Residuals during Drying — Ali Gharaibeh, Muttucumaru Sivakumar, and Dharmappa Hagare; 133 (2), 165-72 (2007).
Haith, Douglas A.
Pesticide Runoff Loads from Lawns and Golf Courses — Douglas A. Haith and Matthew W. Duffany; 133 (4), 435-46 (2007).
Hall, Eric R.
Kinetics of Phosphorus Release and Uptake in a Membrane-Assisted Biological Phosphorus Removal Process — Alessandro Monti, Eric R. Hall, and Mark M. C. van Loosdrecht; 133 (9), 899-908 (2007).
Hand, David W.
Equilibrium versus Nonequilibrium Treatment Modeling in the Optimal Design of Pump-and-Treat Groundwater Remediation Systems — Karen L. Endres, Alex Mayer, and David W. Hand; 133 (8), 809-18 (2007).
Hannoun, Imad
Evaluation of Hypolimnetic Oxygen Demand in a Large Eutrophic Raw Water Reservoir, San Vicente Reservoir, Calif. — Marc Beutel, Imad Hannoun, Jeff Pasek, and Kristen Bowman Kavanagh; 133 (2), 130-8 (2007).
Hantush, Mohammed M.
Temporal Moment Analysis for Volatile Organic Compounds in Dual-Porosity Porous Media: Loss Fractions and Effective Parameters — Rishi Parashar, Rao S. Govindaraju, and Mohammed M. Hantush; 133 (9), 879-90 (2007).
Harrison, Catherine J.
Bench-Scale Testing of Nanofiltration for Seawater Desalination — Catherine J. Harrison, Yann A. Le Gouellec, Robert C. Cheng, and Amy E. Childress; 133 (11), 1004-14 (2007).
Hemond, Harold F.
Contaminant Detection, Identification, and Quantification Using a Microchip Laser Fluorescence Sensor — Joseph V. Sinfield, Harold F. Hemond, John T. Germaine, Bernadette Johnson, and Jonathan Bloch; 133 (3), 346-51 (2007).
Henry, Thomas
Closure to "Integrated Hydrodynamic and Water Quality Modeling System to Support Nutrient Total Maximum Daily Load Development for Wissahickon Creek, Pennsylvania" by Rui Zou, Stephen Carter, Leslie Shoemaker, Andrew Parker, and Thomas Henry — Rui Zou, Stephen Carter, Leslie Shoemaker, Andrew Parker, and Thomas Henry; 133 (11), 1073-4 (2007).
Hofmann, Ron
Inactivation of Adenovirus Types 2, 5, and 41 in Drinking Water by UV Light, Free Chlorine, and Monochloramine — Carole S. Baxter, Ron Hofmann, Michael R. Templeton, Martha Brown, and Robert C. Andrews; 133 (1), 95-103 (2007).
Hondzo, Miki
Fluid Dynamics Impact on Bacterial Physiology: Biochemical Oxygen Demand — Amer Al-Homoud, Miki Hondzo, and Timothy LaPara; 133 (2), 226-36 (2007).
Hong, Yoon-Seok Timothy
Evolutionary Multivariate Dynamic Process Model Induction for a Biological Nutrient Removal Process — Yoon-Seok Timothy Hong and Byeong-Cheon Paik; 133 (12), 1126-35 (2007).
Horneck, Harold
Modeling a Retention Treatment Basin for CSO — J. Alex McCorquodale, Alonso Griborio, Jian-

Guo Li, Harold Horneck, and Nihar Biswas; 133 (3), 263-70 (2007).

Hu, Alan Y.

Activated Carbon Addition to a Submerged Anaerobic Membrane Bioreactor: Effect on Performance, Transmembrane Pressure, and Flux — Alan Y. Hu and David C. Stuckey; 133 (1), 73-80 (2007).

Huang, Cheng-Hsiung

Control Efficiency of Submicron Particles by an Efficient Venturi Scrubber System — Cheng-Hsiung Huang, Chuen-Jinn Tsai, and Yu-Min Wang; 133 (4), 454-61 (2007).

Hunt, P. G.

Characteristic Wind Speed Distributions and Reliability of the Logarithmic Wind Profile — K. S. Ro and P. G. Hunt; 133 (3), 313-8 (2007).

Husting, Chad

Research Experience for Teachers (RET): The Art of Formal Education — Gloria Ononye, Chad Husting, Eugene Jackson, Rangesh Srinivasan, George Sorial, and Anant Kukreti; 133 (1), 2-3 (2007).

Hvitved-Jacobsen, Thorkild

Effects of Iron on Chemical Sulfide Oxidation in Wastewater from Sewer Networks — Asbjørn Haaning Nielsen, Thorkild Hvitved-Jacobsen, and Jes Vollertsen; 133 (6), 655-8 (2007).

Hwang, Daejin

Parameter Evaluation and Performance Comparison of MSW Settlement Prediction Models in Various Landfill Types — Hyun I. Park, Borinara Park, Seung R. Lee, and Daejin Hwang; 133 (1), 64-72 (2007).

Hyun, Yunjung

Remediation of TCE-Contaminated Groundwater in a Sandy Aquifer Using Pulsed Air Sparging: Laboratory and Numerical Studies — Hun-Mi Kim, Yunjung Hyun, and Kang-Kun Lee; 133 (4), 380-8 (2007).

Imran, Syed A.

Pilot-Scale Verification and Analysis of Iron Release Flux Model — G. Mutoti, J. D. Dietz, Syed A. Imran, N. Uddin, and J. S. Taylor; 133 (2), 173-9 (2007).

Jackson, Eugene

Research Experience for Teachers (RET): The Art of Formal Education — Gloria Ononye, Chad Husting, Eugene Jackson, Rangesh Srinivasan, George Sorial, and Anant Kukreti; 133 (1), 2-3 (2007).

Jakher, Aarti

Photodechlorination of Aroclor 1254 in a Pilot-Scale Flow through Photoreactor — Aarti Jakher, Gopal Achari, and Cooper H. Langford; 133 (6), 646-54 (2007).

Jekel, L. J.

Plastics Waste Processing: Comminution Size Distribution and Prediction — L. J. Jekel and E. K. L. Tam; 133 (2), 245-54 (2007).

Jeng, Chwen-Jyh

Particle Penetration through Inclined and *L*-Shaped Cracks — Chwen-Jyh Jeng, Warren B. Kindzierski, and Daniel W. Smith; 133 (3), 331-9 (2007).

Jeon, C. W.

Use of Recombinant Bioluminescent Bacteria for On-Site Monitoring of Toluene Analogs at Petroleum Contaminated Sites — I. C. Kong, M. Kim, K. S. Ko, J. G. Kim, C. W. Jeon, and A. Bhandari; 133 (7), 772-6 (2007).

Jha, Ramakar

Development of Refined BOD and DO Models for Highly Polluted Kali River in India — Ramakar Jha, C. S. P. Ojha, and K. K. S. Bhatia; 133 (8), 839-52 (2007).

Jia, Jinping

Adsorption of Carbon Disulfide (CS_2) in Water by Different Types of Activated Carbon—Equilibrium, Dynamics, and Mathematical Modeling — Ji Yang, Juan Peng, Jinping Jia, and Haijun Fang; 133 (3), 294-302 (2007).

Jiang, Hong

Comparison of Liquid-Liquid Extraction System and Extraction-Evaporation System for High Concentrations of Phenolic Wastewater — Hong Jiang and Qing-Xiang Guo; 133 (2), 198-202 (2007).

Jin, Peng

Comparison of Ion-Selective and Carbon Fiber Mercury Film Microelectrodes for Cadmium Measurement — Peng Jin and Paul L. Bishop; 133 (6), 608-15 (2007).

Jin, Song

Nitrogen Removal in Recirculating Sand Filter Systems with Upflow Anaerobic Components — Michael A. Urynowicz, William C. Boyle, Marjorie E. Bedessem, and Song Jin; 133 (5), 464-70 (2007).

Johnson, Bernadette

Contaminant Detection, Identification, and Quantification Using a Microchip Laser Fluorescence Sensor — Joseph V. Sinfield, Harold F. Hemond, John T. Germaine, Bernadette Johnson, and Jonathan Bloch; 133 (3), 346-51 (2007).

Johnson, Lloyd

Evaluation of Antimicrobial Coatings for Cloth Media Filtration: Case Study — Olivia M. Virgadamo, Lloyd Johnson, and Jeannie L. Darby; 133 (1), 117-20 (2007).

Jun, Hwandon

Valve Distribution and Impact Analysis in Water Distribution Systems — Hwandon Jun, G. V. Loganathan, A. K. Deb, W. Grayman, and J. Snyder; 133 (8), 790-9 (2007).

Kadari, Ravi K.

Quaternized Poly(4-Vinylpyridine) Coated Activated Carbon: Diffusion Controlled Sorption of Chromium(VI) — Dianchen Gang, Ravi K. Kadari, and Baolin Deng; 133 (8), 834-8 (2007).

Kang, Joo-Hyon

Particle Destabilization in Highway Runoff to Optimize Pollutant Removal — Joo-Hyon Kang, Yingxia Li, Sim-Lin Lau, Masoud Kayhanian, and Michael K. Stenstrom; 133 (4), 426-34 (2007).

Karcher, Sandra C.

Numerical Method to Elucidate Likely Target Positions of Chlorine Removal in Anaerobic Sediments Undergoing Polychlorinated Biphenyl Dechlorination — Sandra C. Karcher, Jeanne M. VanBriesen, and Mitchell J. Small; 133 (3), 278-86 (2007).

Kargi, Fikret

2,4,6 Tri-Chlorophenol Containing Wastewater Treatment Using a Hybrid-Loop Bioreactor System — Serkan Eker and Fikret Kargi; 133 (3), 340-5 (2007).

Karney, B. W.

Closure "Two-Dimensional Simulation Model of Sediment Removal and Flow in Rectangular Sedimentation Basin" by Gh. Naser, B. W. Karney, and A. A. Salehi — Gh. Naser, B. W. Karney, and A. A. Salehi; 133 (9), 945-6 (2007).

Kayhanian, Masoud

Particle Destabilization in Highway Runoff to Optimize Pollutant Removal — Joo-Hyon Kang, Yingxia Li, Sim-Lin Lau, Masoud Kayhanian, and Michael K. Stenstrom; 133 (4), 426-34 (2007).

Kim, Hun-Mi

Remediation of TCE-Contaminated Groundwater in a Sandy Aquifer Using Pulsed Air Sparging: Laboratory and Numerical Studies — Hun-Mi Kim, Yunjung Hyun, and Kang-Kun Lee; 133 (4), 380-8 (2007).

Kim, J. G.

Use of Recombinant Bioluminescent Bacteria for On-Site Monitoring of Toluene Analogs at Petroleum Contaminated Sites — I. C. Kong, M. Kim, K. S. Ko, J. G. Kim, C. W. Jeon, and A. Bhandari; 133 (7), 772-6 (2007).

Kim, Ju-Yong

Arsenic Removal by a Colloidal Iron Oxide Coated Sand — Ilwon Ko, Allen P. Davis, Ju-Yong Kim, and Kyoung-Woong Kim; 133 (9), 891-8 (2007).

Kim, Kyoung-Woong

Arsenic Removal by a Colloidal Iron Oxide Coated Sand — Ilwon Ko, Allen P. Davis, Ju-Yong Kim, and Kyoung-Woong Kim; 133 (9), 891-8 (2007).

Kim, M.

Use of Recombinant Bioluminescent Bacteria for On-Site Monitoring of Toluene Analogs at Petroleum Contaminated Sites — I. C. Kong, M. Kim, K. S. Ko, J. G. Kim, C. W. Jeon, and A. Bhandari; 133 (7), 772-6 (2007).

Kim, Suhan

Reaggregation of Flocs in Coagulation-Cross-Flow Microfiltration — Suhan Kim, No-Suk Park, Taeyoung Kim, and Heekyung Park; 133 (5), 507-14 (2007).

Kim, Taeyoung

Reaggregation of Flocs in Coagulation-Cross-Flow Microfiltration — Suhan Kim, No-Suk Park, Taeyoung Kim, and Heekyung Park; 133 (5), 507-14 (2007).

Kindzierski, Warren B.

Particle Penetration through Inclined and *L*-Shaped Cracks — Chwen-Jyh Jeng, Warren B. Kindzierski, and Daniel W. Smith; 133 (3), 331-9 (2007).

Kitis, Mehmet

Effects of Bromide Ion and Natural Organic Matter Fractions on the Formation and Speciation of Chlorination By-Products — Nuray Ates, Ulku Yetis, and Mehmet Kitis; 133 (10), 947-54 (2007).

Kivva, S. L.

Aquatic Assessment of the Chernobyl Nuclear Accident and Its Remediation — Y. Onishi, S. L. Kivva, M. J. Zheleznyak, and O. V. Voitsekhovich; 133 (11), 1015-23 (2007).

Ko, Ilwon

Arsenic Removal by a Colloidal Iron Oxide Coated Sand — Ilwon Ko, Allen P. Davis, Ju-Yong Kim, and Kyoung-Woong Kim; 133 (9), 891-8 (2007).

Ko, K. S.

Use of Recombinant Bioluminescent Bacteria for On-Site Monitoring of Toluene Analogs at Pe-

troleum Contaminated Sites — I. C. Kong, M. Kim, K. S. Ko, J. G. Kim, C. W. Jeon, and A. Bhandari; 133 (7), 772-6 (2007).

Kong, I. C.

Use of Recombinant Bioluminescent Bacteria for On-Site Monitoring of Toluene Analogs at Petroleum Contaminated Sites — I. C. Kong, M. Kim, K. S. Ko, J. G. Kim, C. W. Jeon, and A. Bhandari; 133 (7), 772-6 (2007).

Koparal, A. S.

Electrochemical Desulfurization of Waste Gases in a Batch Reactor — Ü. Tezcan Ün, A. S. Koparal, and Ü. Bakır Öğütveren; 133 (1), 13-9 (2007).

Kucharski, Matthew

Off-Site Exposure to Respirable Aerosols Produced during the Disk-Incorporation of Class B Biosolids — Swee Yang Low, Tania Paez-Rubio, Carolina Baertsch, Matthew Kucharski, and Jordan Peccia; 133 (10), 987-94 (2007).

Kukreti, Anant

Research Experience for Teachers (RET): The Art of Formal Education — Gloria Ononye, Chad Husting, Eugene Jackson, Rangesh Srinivasan, George Sorial, and Anant Kukreti; 133 (1), 2-3 (2007).

Kumar, Bimlesh

Neural Modeling of Square Surface Aerators — Achanta Ramakrishna Rao and Bimlesh Kumar; 133 (4), 411-8 (2007).

Kumar, Ritesh

Dispersion Modeling of Leachates from Thermal Power Plants — Gurdeep Singh, S. K. Gupta, Ritesh Kumar, and M. Sunderarajan; 133 (12), 1088-97 (2007).

Kuo, Jan-Tai

Water Quality and Ecosystem Modeling of Tidal Wetlands — Chou-Ping Yang, Jan-Tai Kuo, Wu-Seng Lung, Jihn-Sung Lai, and Jiunn-Tzong Wu; 133 (7), 711-21 (2007).

Kwan, Chek-Yan

Photochemical Degradation of 2,4,6-Trichlorophenol in the Presence of a Nonionic Surfactant: pH Control on Reaction Kinetics — Wing-Ki Choy, Wei Chu, and Chek-Yan Kwan; 133 (6), 641-5 (2007).

Lahav, Ori

Modeling the Aeration Efficiency of a Passively Aerated Vertical-Flow Biological Filter — Yuval Alfiya, Michal Green, and Ori Lahav; 133 (10), 970-8 (2007).

Lai, Jihn-Sung

Water Quality and Ecosystem Modeling of Tidal Wetlands — Chou-Ping Yang, Jan-Tai Kuo, Wu-Seng Lung, Jihn-Sung Lai, and Jiunn-Tzong Wu; 133 (7), 711-21 (2007).

Lai, Keith C. K.

Effects of Seepage Velocity and Temperature on the Dechlorination of Chlorinated Aliphatic Hydrocarbons — Keith C. K. Lai and Irene M. C. Lo; 133 (9), 859-68 (2007).

Lalman, Jerald A.

Biohydrogen Production by Mesophilic Anaerobic Fermentation of Glucose in the Presence of Linoleic Acid — Nabin Chowdhury, Jerald A. Lalman, Rajesh Seth, and Pius Ndegwa; 133 (12), 1145-52 (2007).

La Motta, Enrique J.

Using the Kinetics of Biological Flocculation and the Limiting Flux Theory for the Preliminary Design of Activated Sludge Systems. I: Model Development — Enrique J. La Motta, J. Alex McCorquodale, and José A. Rojas; 133 (1), 104-10 (2007).

Using the Kinetics of Biological Flocculation and the Limiting Flux Theory for the Preliminary Design of Activated Sludge Systems. II: Experimental Verification — Enrique J. La Motta, José A. Rojas, and J. Alex McCorquodale; 133 (1), 111-6 (2007).

Effect of Biofilm Formation on Roughness Coefficient and Solids Deposition in Small-Diameter PVC Sewer Pipes — Karloren Guzmán, Enrique J. La Motta, J. Alex McCorquodale, Soli Rojas, and Maria Ermogenous; 133 (4), 364-71 (2007).

Combined Anaerobic/Aerobic Secondary Municipal Wastewater Treatment: Pilot-Plant Demonstration of the UASB/Aerobic Solids Contact System — Enrique J. La Motta, Eudomar Silva, Adriana Bustillos, Harold Padrón, and Jackeline Luque; 133 (4), 397-403 (2007).

Langford, Cooper H.

Photodechlorination of Aroclor 1254 in a Pilot-Scale Flow through Photoreactor — Aarti Jakher, Gopal Achari, and Cooper H. Langford; 133 (6), 646-54 (2007).

Lansey, Kevin

Real-Time Detection of Sanitary Sewer Overflows Using Neural Networks and Time Series Analysis — Derya Sumer, Javier Gonzalez, and Kevin Lansey; 133 (4), 353-63 (2007).

Steady-State Water Quality Analysis for Pipe Network Systems — Gunhui Chung, Kevin E. Lansey, and Paul F. Boulos; 133 (7), 777-82 (2007).

Lanyon, Richard

Calibration of a Continuous Simulation Fecal Coliform Model Based on Historical Data Analysis — Gemma Manache, Charles S. Melching, and Richard Lanyon; 133 (7), 681-91 (2007).

LaPara, Timothy

Fluid Dynamics Impact on Bacterial Physiology: Biochemical Oxygen Demand — Amer Al-Homoud, Miki Hondzo, and Timothy LaPara; 133 (2), 226-36 (2007).

Lau, Sim-Lin

Particle Destabilization in Highway Runoff to Optimize Pollutant Removal — Joo-Hyon Kang, Yingxia Li, Sim-Lin Lau, Masoud Kayhanian, and Michael K. Stenstrom; 133 (4), 426-34 (2007).

Lavine, Ingrid N.

Isolation and Characterization of NP4, Arsenate-Reducing *Sulfurospirillum*, from Maine Groundwater — Jean D. MacRae, Ingrid N. Lavine, Kevin A. McCaffery, and Krista Ricupero; 133 (1), 81-8 (2007).

Lee, Kang-Kun

Remediation of TCE-Contaminated Groundwater in a Sandy Aquifer Using Pulsed Air Sparging: Laboratory and Numerical Studies — Hun-Mi Kim, Yunjung Hyun, and Kang-Kun Lee; 133 (4), 380-8 (2007).

Lee, Kwanghun

Development of a New Zero-Valent Iron Zeolite Material to Reduce Nitrate without Ammonium Release — Seunghak Lee, Kwanghun Lee, Sungsu Rhee, and Junboum Park; 133 (1), 6-12 (2007).

Lee, Seung R.

Parameter Evaluation and Performance Comparison of MSW Settlement Prediction Models in Various Landfill Types — Hyun I. Park, Borinara Park, Seung R. Lee, and Daejin Hwang; 133 (1), 64-72 (2007).

Lee, Seunghak

Development of a New Zero-Valent Iron Zeolite Material to Reduce Nitrate without Ammonium Release — Seunghak Lee, Kwanghun Lee, Sungsu Rhee, and Junboum Park; 133 (1), 6-12 (2007).

Le Gouellec, Yann A.

Bench-Scale Testing of Nanofiltration for Seawater Desalination — Catherine J. Harrison, Yann A. Le Gouellec, Robert C. Cheng, and Amy E. Childress; 133 (11), 1004-14 (2007).

Lema, Juan M.

Enhanced Start-Up of Upflow Anaerobic Filters by Pulsation — Amaya Franco, Enrique Roca, and Juan M. Lema; 133 (2), 186-90 (2007).

Li, Hailong

Tracer Studies in a Laboratory Beach Subjected to Waves — Michel C. Boufadel, Hailong Li, Makram T. Suidan, and Albert D. Venosa; 133 (7), 722-32 (2007).

Li, JianGuo

Modeling a Retention Treatment Basin for CSO — J. Alex McCorquodale, Alonso Griborio, Jian-Guo Li, Harold Horneck, and Nihar Biswas; 133 (3), 263-70 (2007).

Li, Taiping

Effect of the Composition of Anodic Purging Solutions on Electroosmosis — Songhu Yuan, Meng Tian, Taiping Li, and Xiaohua Lu; 133 (6), 627-32 (2007).

Li, Yi

Hybrid-Hollow-Fiber Membrane Bioreactor for Cometabolic Transformation of 4-Chlorophenol in the Presence of Phenol — Yi Li and Kai-Chee Loh; 133 (4), 404-10 (2007).

Li, Yingxia

Particle Destabilization in Highway Runoff to Optimize Pollutant Removal — Joo-Hyon Kang, Yingxia Li, Sim-Lin Lau, Masoud Kayhanian, and Michael K. Stenstrom; 133 (4), 426-34 (2007).

Liang, Shuang

Retarded Transport and Accumulation of Soluble Microbial Products in a Membrane Bioreactor — Lianfa Song, Shuang Liang, and Liangyong Yuan; 133 (1), 36-43 (2007).

Lim, Tok Hoon

Potential for 17β-Estradiol and Estrone Degradation in a Recharge Aquifer System — Tok Hoon Lim, Karina Yew Hoong Gin, San San Chow, Yue Hua Chen, Martin Reinhard, and Joo Hwa Tay; 133 (8), 819-26 (2007).

Lima Neto, Iran E.

Dissolved Oxygen Downstream of an Effluent Outfall in an Ice-Covered River: Natural and Artificial Aeration — Iran E. Lima Neto, David Z. Zhu, Nallamuthu Rajaratnam, Tong Yu, Mark Spafford, and Preston McEachern; 133 (11), 1051-60 (2007).

Lin, Che-Jen

Closure to "Mechanistic Model for $CaSO_4$ Fouling on Nanofiltration Membrane" by Che-Jen Lin, Saqib Shirazi, and Pritesh Rao — Che-Jen Lin, Saqib Shirazi, and Prazeeta Shrestha Shakya;

133 (9), 942-3 (2007).

Lin, Lian-Shin

Stream Classification System Based on Susceptibility to Algal Growth in Response to Nutrients — Lian-Shin Lin, Momcilo Markus, and Amy Russell; 133 (7), 692-7 (2007).

Linden, Karl G.

Water Treatment Revolution — Karl G. Linden; 133 (2), 128-9 (2007).

Liu, Chien-Chung

Prevention Efficiencies of Woven Straw to Reduce PM_{10} Emissions from Exposed Area — Yu-Min Chang, Kuo-Tung Su, Chien-Chung Liu, Shiao-Shing Chen, and Chang-Tang Chang; 133 (12), 1153-61 (2007).

Liu, J. C.

Precipitation Removal of Fluoride from Semiconductor Wastewater — M. F. Chang and J. C. Liu; 133 (4), 419-25 (2007).

Lo, Irene M. C.

Chemical-Enhanced Washing for Remediation of Soils Contaminated with Marine Diesel Fuel in the Presence/Absence of Pb — Weihua Zhang and Irene M. C. Lo; 133 (5), 548-55 (2007).

Effects of Seepage Velocity and Temperature on the Dechlorination of Chlorinated Aliphatic Hydrocarbons — Keith C. K. Lai and Irene M. C. Lo; 133 (9), 859-68 (2007).

Loganathan, G. V.

Valve Distribution and Impact Analysis in Water Distribution Systems — Hwandon Jun, G. V. Loganathan, A. K. Deb, W. Grayman, and J. Snyder; 133 (8), 790-9 (2007).

Loh, Kai-Chee

Hybrid-Hollow-Fiber Membrane Bioreactor for Cometabolic Transformation of 4-Chlorophenol in the Presence of Phenol — Yi Li and Kai-Chee Loh; 133 (4), 404-10 (2007).

Lu, Xiaohua

Effect of the Composition of Anodic Purging Solutions on Electroosmosis — Songhu Yuan, Meng Tian, Taiping Li, and Xiaohua Lu; 133 (6), 627-32 (2007).

Lung, Wu-Seng

Water Quality and Ecosystem Modeling of Tidal Wetlands — Chou-Ping Yang, Jan-Tai Kuo, Wu-Seng Lung, Jihn-Sung Lai, and Jiunn-Tzong Wu; 133 (7), 711-21 (2007).

Eutrophication Model for the Patuxent Estuary: Advances in Predictive Capabilities — Wu-Seng Lung and Alex J. Nice; 133 (9), 917-30 (2007).

Luque, Jackeline

Combined Anaerobic/Aerobic Secondary Municipal Wastewater Treatment: Pilot-Plant Demonstration of the UASB/Aerobic Solids Contact System — Enrique J. La Motta, Eudomar Silva, Adriana Bustillos, Harold Padrón, and Jackeline Luque; 133 (4), 397-403 (2007).

MacRae, Jean D.

Isolation and Characterization of NP4, Arsenate-Reducing *Sulfurospirillum*, from Maine Groundwater — Jean D. MacRae, Ingrid N. Lavine, Kevin A. McCaffery, and Krista Ricupero; 133 (1), 81-8 (2007).

Mæhlum, T.

Electrical Conductivity and Chloride Reduction in Leachate Treatment Systems — K. Haarstad and T. Mæhlum; 133 (6), 659-64 (2007).

Maimone, Mark

Discussion of "Integrated Hydrodynamic and Water Quality Modeling System to Support Nutrient Total Maximum Daily Load Development for Wissahickon Creek, Pennsylvania" by Rui Zou, Stephen Carter, Leslie Shoemaker, Andrew Parker, and Thomas Henry — R. Dwayne Myers, Jason E. Cruz, James T. Smullen, and Mark Maimone; 133 (11), 1072-3 (2007).

Manache, Gemma

Calibration of a Continuous Simulation Fecal Coliform Model Based on Historical Data Analysis — Gemma Manache, Charles S. Melching, and Richard Lanyon; 133 (7), 681-91 (2007).

Manous, Joe D., Jr.

Spatial Variation of Sediment Sulfate Reduction Rates in a Saline Lake — Joe D. Manous, Jr., Charles J. Gantzer, and Heinz G. Stefan; 133 (12), 1106-16 (2007).

Manzano, M. A.

Remediation of Contaminated Soils with PCBs Using an Integrated Treatment: Desorption and Oxidation — A. Riaza-Frutos, J. M. Quiroga, and M. A. Manzano; 133 (5), 541-7 (2007).

Maraqa, Munjed A.

Retardation of Nonlinearly Sorbed Solutes in Porous Media — Munjed A. Maraqa; 133 (6), 587-94 (2007).

Retardation of Nonlinearly Sorbed Solutes in Porous Media — Munjed A. Maraqa; 133 (12), 1080-7 (2007).

Marhaba, Taha F.

XRD and Unconfined Compressive Strength Study for a Qualitative Examination of Calcium–Arsenic Compounds Retardation of Cement Hydration in Solidified/Stabilized Arsenic–Iron Hydroxide Sludge — Tanapon Phenrat, Taha F. Marhaba, and Manaskorn Rachakornkij; 133 (6), 595-607 (2007).

Mariño, M. A.

Rule-Based Fuzzy System for Assessing Groundwater Vulnerability — A. Afshar, M. A. Mariño, M. Ebtehaj, and J. Moosavi; 133 (5), 532-40 (2007).

Marinos, Constantine

Comparative Fractional Efficiency Predictions by Selected Cyclone Simulation Models — Constantine Marinos, Alexia A. Economopoulou, and Alexander P. Economopoulos; 133 (5), 556-67 (2007).

Markus, Momcilo

Stream Classification System Based on Susceptibility to Algal Growth in Response to Nutrients — Lian-Shin Lin, Momcilo Markus, and Amy Russell; 133 (7), 692-7 (2007).

Matsuura, Takeshi

Impacts of Hydrophilic Membrane Additives on the Ultrafiltration of River Water — Anh H. Nguyen, Roberto M. Narbaitz, and Takeshi Matsuura; 133 (5), 515-22 (2007).

Mayer, Alex

Equilibrium versus Nonequilibrium Treatment Modeling in the Optimal Design of Pump-and-Treat Groundwater Remediation Systems — Karen L. Endres, Alex Mayer, and David W. Hand; 133 (8), 809-18 (2007).

McCaffery, Kevin A.

Isolation and Characterization of NP4, Arsenate-Reducing *Sulfurospirillum*, from Maine Groundwater — Jean D. MacRae, Ingrid N. Lavine, Kevin A. McCaffery, and Krista Ricupero; 133 (1), 81-8 (2007).

McCorquodale, J. Alex

Using the Kinetics of Biological Flocculation and the Limiting Flux Theory for the Preliminary Design of Activated Sludge Systems. I: Model Development — Enrique J. La Motta, J. Alex McCorquodale, and José A. Rojas; 133 (1), 104-10 (2007).

Using the Kinetics of Biological Flocculation and the Limiting Flux Theory for the Preliminary Design of Activated Sludge Systems. II: Experimental Verification — Enrique J. La Motta, José A. Rojas, and J. Alex McCorquodale; 133 (1), 111-6 (2007).

Modeling a Retention Treatment Basin for CSO — J. Alex McCorquodale, Alonso Griborio, Jian-Guo Li, Harold Horneck, and Nihar Biswas; 133 (3), 263-70 (2007).

Effect of Biofilm Formation on Roughness Coefficient and Solids Deposition in Small-Diameter PVC Sewer Pipes — Karloren Guzmán, Enrique J. La Motta, J. Alex McCorquodale, Soli Rojas, and Maria Ermogenous; 133 (4), 364-71 (2007).

McDonald, B. C.

Impact of Secondary Disinfectants on Copper Corrosion under Stagnation Conditions — S. Rahman, B. C. McDonald, and G. A. Gagnon; 133 (2), 180-5 (2007).

McEachern, Preston

Dissolved Oxygen Downstream of an Effluent Outfall in an Ice-Covered River: Natural and Artificial Aeration — Iran E. Lima Neto, David Z. Zhu, Nallamuthu Rajaratnam, Tong Yu, Mark Spafford, and Preston McEachern; 133 (11), 1051-60 (2007).

Medina, Victor F.

Capture of Airborne Particulate Using Surface Applied Emulsions: Potential for Postdetonation Dirty Bomb Cleanup — Garey A. Fox, John W. Fuchs, Victor F. Medina, and Kaumudi Atapattu; 133 (3), 255-62 (2007).

Meeroff, Daniel E.

Errata for "Iron-Mediated Aeration: Evaluation of Energy-Assisted Enhancement for In Situ Subsurface Remediation" by Daniel E. Meeroff, James D. Englehardt, Luis A. Echegoyen, and Tomoyuki Shibata — Daniel E. Meeroff, James D. Englehardt, Luis A. Echegoyen, and Tomoyuki Shibata; 133 (1), 125 (2007).

Melching, Charles S.

Calibration of a Continuous Simulation Fecal Coliform Model Based on Historical Data Analysis — Gemma Manache, Charles S. Melching, and Richard Lanyon; 133 (7), 681-91 (2007).

Metghalchi, H.

Single-Submerged Attached Growth Bioreactor for Simultaneous Removal of Organics and Nitrogen — P. B. Pedros, J. Y. Wang, and H. Metghalchi; 133 (2), 191-7 (2007).

Miller, Percival A.

Discussion of "Landfill Settlement with Decomposition and Gas Generation" by Ertan Durmusoglu, M. Yavuz Corapcioglu, and Kagan Tuncay — Percival A. Miller and Nicholas L. Clesceri; 133 (7), 783-4 (2007).

Moldrup, Per
Predicting Air Permeability in Undisturbed, Subsurface Sandy Soils from Air-Filled Porosity — Tjalfe G. Poulsen, Per Moldrup, Anne Thorbjørn, and Per Schjønning; 133 (10), 995-1001 (2007).

Monti, Alessandro
Kinetics of Phosphorus Release and Uptake in a Membrane-Assisted Biological Phosphorus Removal Process — Alessandro Monti, Eric R. Hall, and Mark M. C. van Loosdrecht; 133 (9), 899-908 (2007).

Moosavi, J.
Rule-Based Fuzzy System for Assessing Groundwater Vulnerability — A. Afshar, M. A. Mariño, M. Ebtehaj, and J. Moosavi; 133 (5), 532-40 (2007).

Mortensen, Eric R.
Evaluation of Membrane Processes for Reducing Total Dissolved Solids Discharged to the Truckee River — Eric R. Mortensen, Tzahi Y. Cath, Jonathan A. Brant, Keith E. Dennett, and Amy E. Childress; 133 (12), 1136-44 (2007).

Mukhopadhyay, S. N.
Energy Audit, Solids Reduction, and Pathogen Inactivation in Secondary Sludges during Batch Thermophilic Aerobic Digestion Process — Mohsen Nosrati, T. R. Sreekrishnan, and S. N. Mukhopadhyay; 133 (5), 477-84 (2007).

Mulqueen, J.
Horizontal-Flow Biofilm System with Step Feed for Nitrogen Removal — M. Rodgers, L. W. Xiao, and J. Mulqueen; 133 (6), 569-74 (2007).

Mutoti, G.
Pilot-Scale Verification and Analysis of Iron Release Flux Model — G. Mutoti, J. D. Dietz, Syed A. Imran, N. Uddin, and J. S. Taylor; 133 (2), 173-9 (2007).

Myers, R. Dwayne
Discussion of "Integrated Hydrodynamic and Water Quality Modeling System to Support Nutrient Total Maximum Daily Load Development for Wissahickon Creek, Pennsylvania" by Rui Zou, Stephen Carter, Leslie Shoemaker, Andrew Parker, and Thomas Henry — R. Dwayne Myers, Jason E. Cruz, James T. Smullen, and Mark Maimone; 133 (11), 1072-3 (2007).

Nakayama, Keisuke
Density Intrusion and Variation in Dissolved Oxygen Concentrations in a Bay with a Sill at Its Mouth — Tomonari Okada and Keisuke Nakayama; 133 (4), 447-53 (2007).

Narbaitz, Roberto M.
Impacts of Hydrophilic Membrane Additives on the Ultrafiltration of River Water — Anh H. Nguyen, Roberto M. Narbaitz, and Takeshi Matsuura; 133 (5), 515-22 (2007).

Naser, Gh.
Closure "Two-Dimensional Simulation Model of Sediment Removal and Flow in Rectangular Sedimentation Basin" by Gh. Naser, B. W. Karney, and A. A. Salehi — Gh. Naser, B. W. Karney, and A. A. Salehi; 133 (9), 945-6 (2007).

Ndegwa, Pius
Biohydrogen Production by Mesophilic Anaerobic Fermentation of Glucose in the Presence of Linoleic Acid — Nabin Chowdhury, Jerald A. Lalman, Rajesh Seth, and Pius Ndegwa; 133 (12), 1145-52 (2007).

Nerenberg, Robert
Evaluation for Biological Reduction of Nitrate and Perchlorate in Brine Water Using the Hydrogen-Based Membrane Biofilm Reactor — Jinwook Chung, Robert Nerenberg, and Bruce E. Rittmann; 133 (2), 157-64 (2007).

Nguyen, Anh H.
Impacts of Hydrophilic Membrane Additives on the Ultrafiltration of River Water — Anh H. Nguyen, Roberto M. Narbaitz, and Takeshi Matsuura; 133 (5), 515-22 (2007).

Nice, Alex J.
Eutrophication Model for the Patuxent Estuary: Advances in Predictive Capabilities — Wu-Seng Lung and Alex J. Nice; 133 (9), 917-30 (2007).

Nielsen, Asbjørn Haaning
Effects of Iron on Chemical Sulfide Oxidation in Wastewater from Sewer Networks — Asbjørn Haaning Nielsen, Thorkild Hvitved-Jacobsen, and Jes Vollertsen; 133 (6), 655-8 (2007).

Nosrati, Mohsen
Energy Audit, Solids Reduction, and Pathogen Inactivation in Secondary Sludges during Batch Thermophilic Aerobic Digestion Process — Mohsen Nosrati, T. R. Sreekrishnan, and S. N. Mukhopadhyay; 133 (5), 477-84 (2007).

Obolensky, Alexa
Information Collection Rule Data Evaluation and Analysis to Support Impacts on Disinfection By-Product Formation — Alexa Obolensky, Philip C. Singer, and Hiba M. Shukairy; 133 (1), 53-63 (2007).

O'Donnell, David M.
Robotic Monitoring to Assess Impacts of Zebra Mussels and Assimilative Capacity for a River — Joseph S. Denkenberger, David M. O'Donnell, Charles T. Driscoll, and Steven W. Effler; 133 (5), 498-506 (2007).

Oehm, Claudia
Adsorption and Abiotic Transformation of Methyl *tert*-Butyl Ether through Acidic Catalysts — Axel Fischer, Claudia Oehm, Michael Selle, and Peter Werner; 133 (8), 827-33 (2007).

Ohandja, Dieudonné-Guy
Biodegradation of PCE in a Hybrid Membrane Aerated Biofilm Reactor — Dieudonné-Guy Ohandja and David C. Stuckey; 133 (1), 20-7 (2007).

Ojha, C. S. P.
Development of Refined BOD and DO Models for Highly Polluted Kali River in India — Ramakar Jha, C. S. P. Ojha, and K. K. S. Bhatia; 133 (8), 839-52 (2007).

Okada, Tomonari
Density Intrusion and Variation in Dissolved Oxygen Concentrations in a Bay with a Sill at Its Mouth — Tomonari Okada and Keisuke Nakayama; 133 (4), 447-53 (2007).

Onishi, Y.
Aquatic Assessment of the Chernobyl Nuclear Accident and Its Remediation — Y. Onishi, S. L. Kivva, M. J. Zheleznyak, and O. V. Voitsekhovich; 133 (11), 1015-23 (2007).

Ononye, Gloria
Research Experience for Teachers (RET): The Art of Formal Education — Gloria Ononye, Chad Husting, Eugene Jackson, Rangesh Srinivasan, George Sorial, and Anant Kukreti; 133 (1), 2-3 (2007).

Padrón, Harold
Combined Anaerobic/Aerobic Secondary Municipal Wastewater Treatment: Pilot-Plant Demonstration of the UASB/Aerobic Solids Contact System — Enrique J. La Motta, Eudomar Silva, Adriana Bustillos, Harold Padrón, and Jackeline Luque; 133 (4), 397-403 (2007).

Paez-Rubio, Tania
Off-Site Exposure to Respirable Aerosols Produced during the Disk-Incorporation of Class B Biosolids — Swee Yang Low, Tania Paez-Rubio, Carolina Baertsch, Matthew Kucharski, and Jordan Peccia; 133 (10), 987-94 (2007).

Paik, Byeong-Cheon
Evolutionary Multivariate Dynamic Process Model Induction for a Biological Nutrient Removal Process — Yoon-Seok Timothy Hong and Byeong-Cheon Paik; 133 (12), 1126-35 (2007).

Papadopoulos, Basil
Cost and Land Functions for Wastewater Treatment Projects: Typical Simple Linear Regression versus Fuzzy Linear Regression — Basil Papadopoulos, Konstantinos P. Tsagarakis, and Andreas Yannopoulos; 133 (6), 581-6 (2007).

Parashar, Rishi
Temporal Moment Analysis for Volatile Organic Compounds in Dual-Porosity Porous Media: Loss Fractions and Effective Parameters — Rishi Parashar, Rao S. Govindaraju, and Mohammed M. Hantush; 133 (9), 879-90 (2007).

Park, Borinara
Parameter Evaluation and Performance Comparison of MSW Settlement Prediction Models in Various Landfill Types — Hyun I. Park, Borinara Park, Seung R. Lee, and Daejin Hwang; 133 (1), 64-72 (2007).

Park, Hee-Deung
Enhanced Biological Phosphorus Removal Performance and Microbial Population Changes at High Organic Loading Rates — Chang Hoon Ahn, Hee-Deung Park, and Jae Kwang Park; 133 (10), 962-9 (2007).

Park, Heekyung
Reaggregation of Flocs in Coagulation-Cross-Flow Microfiltration — Suhan Kim, No-Suk Park, Taeyoung Kim, and Heekyung Park; 133 (5), 507-14 (2007).

Park, Hyun I.
Parameter Evaluation and Performance Comparison of MSW Settlement Prediction Models in Various Landfill Types — Hyun I. Park, Borinara Park, Seung R. Lee, and Daejin Hwang; 133 (1), 64-72 (2007).

Park, Jae Kwang
Enhanced Biological Phosphorus Removal Performance and Microbial Population Changes at High Organic Loading Rates — Chang Hoon Ahn, Hee-Deung Park, and Jae Kwang Park; 133 (10), 962-9 (2007).

Park, Junboum
Development of a New Zero-Valent Iron Zeolite Material to Reduce Nitrate without Ammonium Release — Seunghak Lee, Kwanghun Lee, Sungsu Rhee, and Junboum Park; 133 (1), 6-12 (2007).

Park, Mi-Hyun
Utility of LANDSAT-Derived Land Use Data for Estimating Storm-Water Pollutant Loads in an Urbanizing Area — Mi-Hyun Park, Irwin H. (Mel) Suffet, and Michael K. Stenstrom; 133 (2),

203-10 (2007).

Park, No-Suk

Reaggregation of Flocs in Coagulation-Cross-Flow Microfiltration — Suhan Kim, No-Suk Park, Taeyoung Kim, and Heekyung Park; 133 (5), 507-14 (2007).

Parker, Andrew

Closure to "Integrated Hydrodynamic and Water Quality Modeling System to Support Nutrient Total Maximum Daily Load Development for Wissahickon Creek, Pennsylvania" by Rui Zou, Stephen Carter, Leslie Shoemaker, Andrew Parker, and Thomas Henry — Rui Zou, Stephen Carter, Leslie Shoemaker, Andrew Parker, and Thomas Henry; 133 (11), 1073-4 (2007).

Parks, Jeffrey L.

Boron Removal via Formation of Magnesium Silicate Solids during Precipitative Softening — Jeffrey L. Parks and Marc Edwards; 133 (2), 149-56 (2007).

Pasek, Jeff

Evaluation of Hypolimnetic Oxygen Demand in a Large Eutrophic Raw Water Reservoir, San Vicente Reservoir, Calif. — Marc Beutel, Imad Hannoun, Jeff Pasek, and Kristen Bowman Kavanagh; 133 (2), 130-8 (2007).

Peccia, Jordan

Off-Site Exposure to Respirable Aerosols Produced during the Disk-Incorporation of Class B Biosolids — Swee Yang Low, Tania Paez-Rubio, Carolina Baertsch, Matthew Kucharski, and Jordan Peccia; 133 (10), 987-94 (2007).

Pedros, P. B.

Single-Submerged Attached Growth Bioreactor for Simultaneous Removal of Organics and Nitrogen — P. B. Pedros, J. Y. Wang, and H. Metghalchi; 133 (2), 191-7 (2007).

Peirce, J. Jeffrey

Nitric Oxide Emission and Soil Microbial Activities in Toluene Contaminated Soil — Ki Don Cho and J. Jeffrey Peirce; 133 (2), 237-44 (2007).

Peng, Feng

Particle Characterization and Settling Velocities for a Water Supply Reservoir during a Turbidity Event — MaryGail Perkins, Steven W. Effler, Feng Peng, Donald Pierson, David G. Smith, and Yogesh C. Agrawal; 133 (8), 800-8 (2007).

Size Distributions and Light Scattering Features of Minerogenic Particles in a Stream during Runoff Events — Steven W. Effler, Feng Peng, and Rakesh K. Gelda; 133 (9), 931-40 (2007).

Peng, Juan

Adsorption of Carbon Disulfide (CS_2) in Water by Different Types of Activated Carbon—Equilibrium, Dynamics, and Mathematical Modeling — Ji Yang, Juan Peng, Jinping Jia, and Haijun Fang; 133 (3), 294-302 (2007).

Peng, Weihua

Sludge Blanket Formation and Its Effects on Secondary Clarifier Performance — Weihua Peng, John Rigdon, and George Russell; 133 (7), 758-64 (2007).

Perendeci, Altunay

Evaluation of Input Variables in Adaptive-Network-Based Fuzzy Inference System Modeling for an Anaerobic Wastewater Treatment Plant under Unsteady State — Altunay Perendeci, Sever Arslan, Abdurrahman Tanyolaç, and Serdar S. Çelebi; 133 (7), 765-71 (2007).

Perkins, MaryGail

Particle Characterization and Settling Velocities for a Water Supply Reservoir during a Turbidity Event — MaryGail Perkins, Steven W. Effler, Feng Peng, Donald Pierson, David G. Smith, and Yogesh C. Agrawal; 133 (8), 800-8 (2007).

Persson, Kenneth M.

Water and Solute Movement in Air Pollution Control Residues Measured by Time-Domain Reflectometry — Martijn van Praagh, Magnus Persson, and Kenneth M. Persson; 133 (7), 750-7 (2007).

Persson, Magnus

Water and Solute Movement in Air Pollution Control Residues Measured by Time-Domain Reflectometry — Martijn van Praagh, Magnus Persson, and Kenneth M. Persson; 133 (7), 750-7 (2007).

Phenrat, Tanapon

XRD and Unconfined Compressive Strength Study for a Qualitative Examination of Calcium–Arsenic Compounds Retardation of Cement Hydration in Solidified/Stabilized Arsenic–Iron Hydroxide Sludge — Tanapon Phenrat, Taha F. Marhaba, and Manaskorn Rachakornkij; 133 (6), 595-607 (2007).

Pierson, Donald

Particle Characterization and Settling Velocities for a Water Supply Reservoir during a Turbidity Event — MaryGail Perkins, Steven W. Effler, Feng Peng, Donald Pierson, David G. Smith, and Yogesh C. Agrawal; 133 (8), 800-8 (2007).

Poulsen, Tjalfe G.

Predicting Air Permeability in Undisturbed, Subsurface Sandy Soils from Air-Filled Porosity — Tjalfe G. Poulsen, Per Moldrup, Anne Thorbjørn, and Per Schjønning; 133 (10), 995-1001 (2007).

Quiroga, J. M.

Remediation of Contaminated Soils with PCBs Using an Integrated Treatment: Desorption and Oxidation — A. Riaza-Frutos, J. M. Quiroga, and M. A. Manzano; 133 (5), 541-7 (2007).

Rachakornkij, Manaskorn

XRD and Unconfined Compressive Strength Study for a Qualitative Examination of Calcium–Arsenic Compounds Retardation of Cement Hydration in Solidified/Stabilized Arsenic–Iron Hydroxide Sludge — Tanapon Phenrat, Taha F. Marhaba, and Manaskorn Rachakornkij; 133 (6), 595-607 (2007).

Rahman, S.

Impact of Secondary Disinfectants on Copper Corrosion under Stagnation Conditions — S. Rahman, B. C. McDonald, and G. A. Gagnon; 133 (2), 180-5 (2007).

Rajaratnam, Nallamuthu

Dissolved Oxygen Downstream of an Effluent Outfall in an Ice-Covered River: Natural and Artificial Aeration — Iran E. Lima Neto, David Z. Zhu, Nallamuthu Rajaratnam, Tong Yu, Mark Spafford, and Preston McEachern; 133 (11), 1051-60 (2007).

Ramaswami, Anu

Evidence for Phytodegradation of MTBE from Coupled Bench-Scale and Intermediate-Scale Tests — Ellen G. Rubin and Anu Ramaswami; 133 (4), 389-96 (2007).

Rao, Achanta Ramakrishna

Neural Modeling of Square Surface Aerators — Achanta Ramakrishna Rao and Bimlesh Kumar; 133 (4), 411-8 (2007).

Reed, Brian E.

Modeling As(V) Removal in Iron Oxide Impregnated Activated Carbon Columns — Ronald L. Vaughan, Jr., Brian E. Reed, and Edward H. Smith; 133 (1), 121-4 (2007).

Reinhard, Martin

Potential for 17β-Estradiol and Estrone Degradation in a Recharge Aquifer System — Tok Hoon Lim, Karina Yew Hoong Gin, San San Chow, Yue Hua Chen, Martin Reinhard, and Joo Hwa Tay; 133 (8), 819-26 (2007).

Reinhart, Debra R.

Liquid Sodium Ferrate and Fenton's Reagent for Treatment of Mature Landfill Leachate — Eyad S. Batarseh, Debra R. Reinhart, and Luke Daly; 133 (11), 1042-50 (2007).

Strategy for Complete Nitrogen Removal in Bioreactor Landfills — Nicole D. Berge, Debra R. Reinhart, and Eyad S. Batarseh; 133 (12), 1117-25 (2007).

Reinhold, Dawn M.

Uptake of Halogenated Phenols by Aquatic Plants — Jacqueline M. Tront, Dawn M. Reinhold, Angela W. Bragg, and F. Michael Saunders; 133 (10), 955-61 (2007).

Rhee, Sungsu

Development of a New Zero-Valent Iron Zeolite Material to Reduce Nitrate without Ammonium Release — Seunghak Lee, Kwanghun Lee, Sungsu Rhee, and Junboum Park; 133 (1), 6-12 (2007).

Riaza-Frutos, A.

Remediation of Contaminated Soils with PCBs Using an Integrated Treatment: Desorption and Oxidation — A. Riaza-Frutos, J. M. Quiroga, and M. A. Manzano; 133 (5), 541-7 (2007).

Ricupero, Krista

Isolation and Characterization of NP4, Arsenate-Reducing *Sulfurospirillum*, from Maine Groundwater — Jean D. MacRae, Ingrid N. Lavine, Kevin A. McCaffery, and Krista Ricupero; 133 (1), 81-8 (2007).

Rigdon, John

Sludge Blanket Formation and Its Effects on Secondary Clarifier Performance — Weihua Peng, John Rigdon, and George Russell; 133 (7), 758-64 (2007).

Rittmann, Bruce E.

Evaluation for Biological Reduction of Nitrate and Perchlorate in Brine Water Using the Hydrogen-Based Membrane Biofilm Reactor — Jinwook Chung, Robert Nerenberg, and Bruce E. Rittmann; 133 (2), 157-64 (2007).

Ro, K. S.

Characteristic Wind Speed Distributions and Reliability of the Logarithmic Wind Profile — K. S. Ro and P. G. Hunt; 133 (3), 313-8 (2007).

Roca, Enrique

Enhanced Start-Up of Upflow Anaerobic Filters by Pulsation — Amaya Franco, Enrique Roca, and Juan M. Lema; 133 (2), 186-90 (2007).

Rodgers, M.

Horizontal-Flow Biofilm System with Step Feed for Nitrogen Removal — M. Rodgers, L. W. Xiao, and J. Mulqueen; 133 (6), 569-74 (2007).

Rojas, José A.
Using the Kinetics of Biological Flocculation and the Limiting Flux Theory for the Preliminary Design of Activated Sludge Systems. I: Model Development — Enrique J. La Motta, J. Alex McCorquodale, and José A. Rojas; 133 (1), 104-10 (2007).
Using the Kinetics of Biological Flocculation and the Limiting Flux Theory for the Preliminary Design of Activated Sludge Systems. II: Experimental Verification — Enrique J. La Motta, José A. Rojas, and J. Alex McCorquodale; 133 (1), 111-6 (2007).
Rojas, Soli
Effect of Biofilm Formation on Roughness Coefficient and Solids Deposition in Small-Diameter PVC Sewer Pipes — Karloren Guzmán, Enrique J. La Motta, J. Alex McCorquodale, Soli Rojas, and Maria Ermogenous; 133 (4), 364-71 (2007).
Rubin, Ellen G.
Evidence for Phytodegradation of MTBE from Coupled Bench-Scale and Intermediate-Scale Tests — Ellen G. Rubin and Anu Ramaswami; 133 (4), 389-96 (2007).
Rusch, Kelly A.
Phosphorus Treatment Capability of Marshland Upwelling System under High Background Salinity Conditions — Derek A. Evans and Kelly A. Rusch; 133 (11), 1061-71 (2007).
Russell, Amy
Stream Classification System Based on Susceptibility to Algal Growth in Response to Nutrients — Lian-Shin Lin, Momcilo Markus, and Amy Russell; 133 (7), 692-7 (2007).
Russell, George
Sludge Blanket Formation and Its Effects on Secondary Clarifier Performance — Weihua Peng, John Rigdon, and George Russell; 133 (7), 758-64 (2007).
Rustum, Rabee
Replacing Outliers and Missing Values from Activated Sludge Data Using Kohonen Self-Organizing Map — Rabee Rustum and Adebayo J. Adeloye; 133 (9), 909-16 (2007).
Salehi, A. A.
Closure "Two-Dimensional Simulation Model of Sediment Removal and Flow in Rectangular Sedimentation Basin" by Gh. Naser, B. W. Karney, and A. A. Salehi — Gh. Naser, B. W. Karney, and A. A. Salehi; 133 (9), 945-6 (2007).
Samadder, Sukha Ranjan
GIS Approach of Delineation and Risk Assessment of Areas Affected by Arsenic Pollution in Drinking Water — Sukha Ranjan Samadder and Chillara Subbarao; 133 (7), 742-9 (2007).
Saunders, F. Michael
Uptake of Halogenated Phenols by Aquatic Plants — Jacqueline M. Tront, Dawn M. Reinhold, Angela W. Bragg, and F. Michael Saunders; 133 (10), 955-61 (2007).
Schiewer, Silke
Total Coliform Survival Characteristics in Frozen Soils — Hrishikesh Adhikari, David L. Barnes, Silke Schiewer, and Daniel M. White; 133 (12), 1098-105 (2007).
Schjønning, Per
Predicting Air Permeability in Undisturbed, Subsurface Sandy Soils from Air-Filled Porosity — Tjalfe G. Poulsen, Per Moldrup, Anne Thorbjørn, and Per Schjønning; 133 (10), 995-1001 (2007).
Schmidt, Jeremy T.
Rates of Trace Mineral-Catalyzed Decomposition of Hydrogen Peroxide — Amy L. Teel, Dennis D. Finn, Jeremy T. Schmidt, Lynn M. Cutler, and Richard J. Watts; 133 (8), 853-8 (2007).
Schock, Michael R.
Removing Esoteric Contaminants from Drinking Waters: Impacts of Treatment Implementation — Thomas F. Speth and Michael R. Schock; 133 (7), 665-9 (2007).
Selle, Michael
Adsorption and Abiotic Transformation of Methyl *tert*-Butyl Ether through Acidic Catalysts — Axel Fischer, Claudia Oehm, Michael Selle, and Peter Werner; 133 (8), 827-33 (2007).
Seth, Rajesh
Biohydrogen Production by Mesophilic Anaerobic Fermentation of Glucose in the Presence of Linoleic Acid — Nabin Chowdhury, Jerald A. Lalman, Rajesh Seth, and Pius Ndegwa; 133 (12), 1145-52 (2007).
Shakya, Prazeeta Shrestha
Closure to "Mechanistic Model for $CaSO_4$ Fouling on Nanofiltration Membrane" by Che-Jen Lin, Saqib Shirazi, and Pritesh Rao — Che-Jen Lin, Saqib Shirazi, and Prazeeta Shrestha Shakya; 133 (9), 942-3 (2007).
Shibata, Tomoyuki
Errata for "Iron-Mediated Aeration: Evaluation of Energy-Assisted Enhancement for In Situ Subsurface Remediation" by Daniel E. Meeroff, James D. Englehardt, Luis A. Echegoyen, and Tomoyuki Shibata — Daniel E. Meeroff, James D. Englehardt, Luis A. Echegoyen, and Tomoyuki Shibata; 133 (1), 125 (2007).
Shirazi, Saqib
Closure to "Mechanistic Model for $CaSO_4$ Fouling on Nanofiltration Membrane" by Che-Jen Lin, Saqib Shirazi, and Pritesh Rao — Che-Jen Lin, Saqib Shirazi, and Prazeeta Shrestha Shakya; 133 (9), 942-3 (2007).
Shoemaker, Leslie
Closure to "Integrated Hydrodynamic and Water Quality Modeling System to Support Nutrient Total Maximum Daily Load Development for Wissahickon Creek, Pennsylvania" by Rui Zou, Stephen Carter, Leslie Shoemaker, Andrew Parker, and Thomas Henry — Rui Zou, Stephen Carter, Leslie Shoemaker, Andrew Parker, and Thomas Henry; 133 (11), 1073-4 (2007).
Shukairy, Hiba M.
Information Collection Rule Data Evaluation and Analysis to Support Impacts on Disinfection By-Product Formation — Alexa Obolensky, Philip C. Singer, and Hiba M. Shukairy; 133 (1), 53-63 (2007).
Silva, Eudomar
Combined Anaerobic/Aerobic Secondary Municipal Wastewater Treatment: Pilot-Plant Demonstration of the UASB/Aerobic Solids Contact System — Enrique J. La Motta, Eudomar Silva, Adriana Bustillos, Harold Padrón, and Jackeline Luque; 133 (4), 397-403 (2007).
Sinfield, Joseph V.
Contaminant Detection, Identification, and Quantification Using a Microchip Laser Fluorescence Sensor — Joseph V. Sinfield, Harold F. Hemond, John T. Germaine, Bernadette Johnson, and Jonathan Bloch; 133 (3), 346-51 (2007).
Singer, Philip C.
Information Collection Rule Data Evaluation and Analysis to Support Impacts on Disinfection By-Product Formation — Alexa Obolensky, Philip C. Singer, and Hiba M. Shukairy; 133 (1), 53-63 (2007).
Singh, Gurdeep
Dispersion Modeling of Leachates from Thermal Power Plants — Gurdeep Singh, S. K. Gupta, Ritesh Kumar, and M. Sunderarajan; 133 (12), 1088-97 (2007).
Sivakumar, Muttucumaru
Mathematical Model to Predict Solids Content of Water Treatment Residuals during Drying — Ali Gharaibeh, Muttucumaru Sivakumar, and Dharmappa Hagare; 133 (2), 165-72 (2007).
Small, Mitchell J.
Numerical Method to Elucidate Likely Target Positions of Chlorine Removal in Anaerobic Sediments Undergoing Polychlorinated Biphenyl Dechlorination — Sandra C. Karcher, Jeanne M. VanBriesen, and Mitchell J. Small; 133 (3), 278-86 (2007).
Drinking Water Treatment Plant Design Incorporating Variability and Uncertainty — Dominic L. Boccelli, Mitchell J. Small, and Urmila M. Diwekar; 133 (3), 303-12 (2007).
Smith, Daniel W.
Particle Penetration through Inclined and *L*-Shaped Cracks — Chwen-Jyh Jeng, Warren B. Kindzierski, and Daniel W. Smith; 133 (3), 331-9 (2007).
Smith, David G.
Particle Characterization and Settling Velocities for a Water Supply Reservoir during a Turbidity Event — MaryGail Perkins, Steven W. Effler, Feng Peng, Donald Pierson, David G. Smith, and Yogesh C. Agrawal; 133 (8), 800-8 (2007).
Smith, Edward H.
Modeling As(V) Removal in Iron Oxide Impregnated Activated Carbon Columns — Ronald L. Vaughan, Jr., Brian E. Reed, and Edward H. Smith; 133 (1), 121-4 (2007).
Smullen, James T.
Discussion of "Integrated Hydrodynamic and Water Quality Modeling System to Support Nutrient Total Maximum Daily Load Development for Wissahickon Creek, Pennsylvania" by Rui Zou, Stephen Carter, Leslie Shoemaker, Andrew Parker, and Thomas Henry — R. Dwayne Myers, Jason E. Cruz, James T. Smullen, and Mark Maimone; 133 (11), 1072-3 (2007).
Snyder, J.
Valve Distribution and Impact Analysis in Water Distribution Systems — Hwandon Jun, G. V. Loganathan, A. K. Deb, W. Grayman, and J. Snyder; 133 (8), 790-9 (2007).
Song, Lianfa
Retarded Transport and Accumulation of Soluble Microbial Products in a Membrane Bioreactor — Lianfa Song, Shuang Liang, and Liangyong Yuan; 133 (1), 36-43 (2007).
Sorial, George
Research Experience for Teachers (RET): The Art of Formal Education — Gloria Ononye, Chad Husting, Eugene Jackson, Rangesh Srinivasan, George Sorial, and Anant Kukreti; 133 (1), 2-3 (2007).
Spafford, Mark
Dissolved Oxygen Downstream of an Effluent Outfall in an Ice-Covered River: Natural and Artifi-

cial Aeration — Iran E. Lima Neto, David Z. Zhu, Nallamuthu Rajaratnam, Tong Yu, Mark Spafford, and Preston McEachern; 133 (11), 1051-60 (2007).

Speth, Thomas F.

Removing Esoteric Contaminants from Drinking Waters: Impacts of Treatment Implementation — Thomas F. Speth and Michael R. Schock; 133 (7), 665-9 (2007).

Sreekrishnan, T. R.

Energy Audit, Solids Reduction, and Pathogen Inactivation in Secondary Sludges during Batch Thermophilic Aerobic Digestion Process — Mohsen Nosrati, T. R. Sreekrishnan, and S. N. Mukhopadhyay; 133 (5), 477-84 (2007).

Srinivasan, Rangesh

Research Experience for Teachers (RET): The Art of Formal Education — Gloria Ononye, Chad Husting, Eugene Jackson, Rangesh Srinivasan, George Sorial, and Anant Kukreti; 133 (1), 2-3 (2007).

Stamou, Anastasios

Discussion of "Two-Dimensional Simulation Model of Sediment Removal and Flow in Rectangular Sedimentation Basin" by Gh. Naser, B. W. Karney, and A. A. Salehi — Anastasios Stamou; 133 (9), 944-5 (2007).

Stefan, Heinz G.

Spatial Variation of Sediment Sulfate Reduction Rates in a Saline Lake — Joe D. Manous, Jr., Charles J. Gantzer, and Heinz G. Stefan; 133 (12), 1106-16 (2007).

Stenstrom, Michael K.

Utility of LANDSAT-Derived Land Use Data for Estimating Storm-Water Pollutant Loads in an Urbanizing Area — Mi-Hyun Park, Irwin H. (Mel) Suffet, and Michael K. Stenstrom; 133 (2), 203-10 (2007).

Particle Destabilization in Highway Runoff to Optimize Pollutant Removal — Joo-Hyon Kang, Yingxia Li, Sim-Lin Lau, Masoud Kayhanian, and Michael K. Stenstrom; 133 (4), 426-34 (2007).

Stuckey, David C.

Biodegradation of PCE in a Hybrid Membrane Aerated Biofilm Reactor — Dieudonné-Guy Ohandja and David C. Stuckey; 133 (1), 20-7 (2007).

Bioavailability and Toxicity of Metal Nutrients during Anaerobic Digestion — Sérgio F. Aquino and David C. Stuckey; 133 (1), 28-35 (2007).

Activated Carbon Addition to a Submerged Anaerobic Membrane Bioreactor: Effect on Performance, Transmembrane Pressure, and Flux — Alan Y. Hu and David C. Stuckey; 133 (1), 73-80 (2007).

Su, Kuo-Tung

Prevention Efficiencies of Woven Straw to Reduce PM_{10} Emissions from Exposed Area — Yu-Min Chang, Kuo-Tung Su, Chien-Chung Liu, Shiao-Shing Chen, and Chang-Tang Chang; 133 (12), 1153-61 (2007).

Subbarao, Chillara

GIS Approach of Delineation and Risk Assessment of Areas Affected by Arsenic Pollution in Drinking Water — Sukha Ranjan Samadder and Chillara Subbarao; 133 (7), 742-9 (2007).

Suffet, Irwin H. (Mel)

Utility of LANDSAT-Derived Land Use Data for Estimating Storm-Water Pollutant Loads in an Urbanizing Area — Mi-Hyun Park, Irwin H. (Mel) Suffet, and Michael K. Stenstrom; 133 (2), 203-10 (2007).

Suidan, Makram T.

Tracer Studies in a Laboratory Beach Subjected to Waves — Michel C. Boufadel, Hailong Li, Makram T. Suidan, and Albert D. Venosa; 133 (7), 722-32 (2007).

Sumer, Derya

Real-Time Detection of Sanitary Sewer Overflows Using Neural Networks and Time Series Analysis — Derya Sumer, Javier Gonzalez, and Kevin Lansey; 133 (4), 353-63 (2007).

Sun, Dezhi

Genetic Algorithm Solution of a Gray Nonlinear Water Environment Management Model Developed for the Liming River in Daqing, China — Dezhi Sun and Wei Yang; 133 (3), 287-93 (2007).

Sunderarajan, M.

Dispersion Modeling of Leachates from Thermal Power Plants — Gurdeep Singh, S. K. Gupta, Ritesh Kumar, and M. Sunderarajan; 133 (12), 1088-97 (2007).

Suttigarn, Arthon

Arsenite Oxidation by *Alcaligenes Faecalis* Strain O1201 in a Continuous-Flow Bioreactor — Yi-Tin Wang and Arthon Suttigarn; 133 (5), 471-6 (2007).

Swamee, Prabhata K.

Improved Method for Aggregation of Water Quality Subindices — Prabhata K. Swamee and Aditya Tyagi; 133 (2), 220-5 (2007).

Tam, E. K. L.

Plastics Waste Processing: Comminution Size Distribution and Prediction — L. J. Jekel and E. K. L. Tam; 133 (2), 245-54 (2007).

Tansel, Berrin

Discussion of "Mechanistic Model for $CaSO_4$ Fouling on Nanofiltration Membrane" by Che-Jen Lin, Saqib Shirazi, and Pritesh Rao — Berrin Tansel; 133 (9), 941-2 (2007).

Tanyolaç, Abdurrahman

Evaluation of Input Variables in Adaptive-Network-Based Fuzzy Inference System Modeling for an Anaerobic Wastewater Treatment Plant under Unsteady State — Altunay Perendeci, Sever Arslan, Abdurrahman Tanyolaç, and Serdar S. Çelebi; 133 (7), 765-71 (2007).

Tay, Joo Hwa

Potential for 17β-Estradiol and Estrone Degradation in a Recharge Aquifer System — Tok Hoon Lim, Karina Yew Hoong Gin, San San Chow, Yue Hua Chen, Martin Reinhard, and Joo Hwa Tay; 133 (8), 819-26 (2007).

Taylor, J. S.

Pilot-Scale Verification and Analysis of Iron Release Flux Model — G. Mutoti, J. D. Dietz, Syed A. Imran, N. Uddin, and J. S. Taylor; 133 (2), 173-9 (2007).

Teel, Amy L.

Rates of Trace Mineral-Catalyzed Decomposition of Hydrogen Peroxide — Amy L. Teel, Dennis D. Finn, Jeremy T. Schmidt, Lynn M. Cutler, and Richard J. Watts; 133 (8), 853-8 (2007).

Templeton, Michael R.

Inactivation of Adenovirus Types 2, 5, and 41 in Drinking Water by UV Light, Free Chlorine, and Monochloramine — Carole S. Baxter, Ron Hofmann, Michael R. Templeton, Martha Brown, and Robert C. Andrews; 133 (1), 95-103 (2007).

Tezcan Ün, Ü.

Electrochemical Desulfurization of Waste Gases in a Batch Reactor — Ü. Tezcan Ün, A. S. Koparal, and Ü. Bakır Öğütveren; 133 (1), 13-9 (2007).

Thorbjørn, Anne

Predicting Air Permeability in Undisturbed, Subsurface Sandy Soils from Air-Filled Porosity — Tjalfe G. Poulsen, Per Moldrup, Anne Thorbjørn, and Per Schjønning; 133 (10), 995-1001 (2007).

Tian, Meng

Effect of the Composition of Anodic Purging Solutions on Electroosmosis — Songhu Yuan, Meng Tian, Taiping Li, and Xiaohua Lu; 133 (6), 627-32 (2007).

Tišler, Tatjana

Pretreatment of Highly Polluted Pharmaceutical Waste Broth by Wet Air Oxidation — Andreja Žgajnar Gotvajn, Jana Zagorc-Končan, and Tatjana Tišler; 133 (1), 89-94 (2007).

Tront, Jacqueline M.

Uptake of Halogenated Phenols by Aquatic Plants — Jacqueline M. Tront, Dawn M. Reinhold, Angela W. Bragg, and F. Michael Saunders; 133 (10), 955-61 (2007).

Tsagarakis, Konstantinos P.

Cost and Land Functions for Wastewater Treatment Projects: Typical Simple Linear Regression versus Fuzzy Linear Regression — Basil Papadopoulos, Konstantinos P. Tsagarakis, and Andreas Yannopoulos; 133 (6), 581-6 (2007).

Tsai, Chuen-Jinn

Control Efficiency of Submicron Particles by an Efficient Venturi Scrubber System — Cheng-Hsiung Huang, Chuen-Jinn Tsai, and Yu-Min Wang; 133 (4), 454-61 (2007).

Tu, Wei

Beneficial Reuse of FGD Material in the Construction of Low Permeability Liners: Impacts on Inorganic Water Quality Constituents — Chin-Min Cheng, Wei Tu, Behrad Zand, Tarunjit Butalia, William Wolfe, and Harold Walker; 133 (5), 523-31 (2007).

Tuncay, Kagan

Closure to "Landfill Settlement with Decomposition and Gas Generation" by Ertan Durmusoglu, M. Yavuz Corapcioglu, and Kagan Tuncay — Ertan Durmusoglu, M. Yavuz Corapcioglu, and Kagan Tuncay; 133 (7), 785 (2007).

Tyagi, Aditya

Improved Method for Aggregation of Water Quality Subindices — Prabhata K. Swamee and Aditya Tyagi; 133 (2), 220-5 (2007).

Uddin, N.

Pilot-Scale Verification and Analysis of Iron Release Flux Model — G. Mutoti, J. D. Dietz, Syed A. Imran, N. Uddin, and J. S. Taylor; 133 (2), 173-9 (2007).

Urynowicz, Michael A.

Nitrogen Removal in Recirculating Sand Filter Systems with Upflow Anaerobic Components — Michael A. Urynowicz, William C. Boyle, Marjorie E. Bedessem, and Song Jin; 133 (5), 464-70 (2007).

VanBriesen, Jeanne M.

Numerical Method to Elucidate Likely Target Positions of Chlorine Removal in Anaerobic Sediments Undergoing Polychlorinated Biphenyl Dechlorination — Sandra C. Karcher, Jeanne M.

VanBriesen, and Mitchell J. Small; 133 (3), 278-86 (2007).

van Loosdrecht, Mark M. C.

Kinetics of Phosphorus Release and Uptake in a Membrane-Assisted Biological Phosphorus Removal Process — Alessandro Monti, Eric R. Hall, and Mark M. C. van Loosdrecht; 133 (9), 899-908 (2007).

van Praagh, Martijn

Water and Solute Movement in Air Pollution Control Residues Measured by Time-Domain Reflectometry — Martijn van Praagh, Magnus Persson, and Kenneth M. Persson; 133 (7), 750-7 (2007).

Vaughan, Ronald L., Jr.

Modeling As(V) Removal in Iron Oxide Impregnated Activated Carbon Columns — Ronald L. Vaughan, Jr., Brian E. Reed, and Edward H. Smith; 133 (1), 121-4 (2007).

Venosa, Albert D.

Tracer Studies in a Laboratory Beach Subjected to Waves — Michel C. Boufadel, Hailong Li, Makram T. Suidan, and Albert D. Venosa; 133 (7), 722-32 (2007).

Viadero, Roger C., Jr.

Adsorption and Precoat Filtration Studies of Synthetic Dye Removal by Acid Mine Drainage Sludge — Xinchao Wei and Roger C. Viadero, Jr.; 133 (6), 633-40 (2007).

Virgadamo, Olivia M.

Evaluation of Antimicrobial Coatings for Cloth Media Filtration: Case Study — Olivia M. Virgadamo, Lloyd Johnson, and Jeannie L. Darby; 133 (1), 117-20 (2007).

Voitsekhovich, O. V.

Aquatic Assessment of the Chernobyl Nuclear Accident and Its Remediation — Y. Onishi, S. L. Kivva, M. J. Zheleznyak, and O. V. Voitsekhovich; 133 (11), 1015-23 (2007).

Vollertsen, Jes

Effects of Iron on Chemical Sulfide Oxidation in Wastewater from Sewer Networks — Asbjørn Haaning Nielsen, Thorkild Hvitved-Jacobsen, and Jes Vollertsen; 133 (6), 655-8 (2007).

Walker, Harold

Beneficial Reuse of FGD Material in the Construction of Low Permeability Liners: Impacts on Inorganic Water Quality Constituents — Chin-Min Cheng, Wei Tu, Behrad Zand, Tarunjit Butalia, William Wolfe, and Harold Walker; 133 (5), 523-31 (2007).

Wang, J. Y.

Single-Submerged Attached Growth Bioreactor for Simultaneous Removal of Organics and Nitrogen — P. B. Pedros, J. Y. Wang, and H. Metghalchi; 133 (2), 191-7 (2007).

Wang, Yi-Tin

Arsenite Oxidation by *Alcaligenes Faecalis* Strain O1201 in a Continuous-Flow Bioreactor — Yi-Tin Wang and Arthon Suttigarn; 133 (5), 471-6 (2007).

Wang, Yu-Min

Control Efficiency of Submicron Particles by an Efficient Venturi Scrubber System — Cheng-Hsiung Huang, Chuen-Jinn Tsai, and Yu-Min Wang; 133 (4), 454-61 (2007).

Watts, Richard J.

Rates of Trace Mineral-Catalyzed Decomposition of Hydrogen Peroxide — Amy L. Teel, Dennis D. Finn, Jeremy T. Schmidt, Lynn M. Cutler, and Richard J. Watts; 133 (8), 853-8 (2007).

Wei, Xinchao

Adsorption and Precoat Filtration Studies of Synthetic Dye Removal by Acid Mine Drainage Sludge — Xinchao Wei and Roger C. Viadero, Jr.; 133 (6), 633-40 (2007).

Weiss, Peter T.

Enhanced Sand Filtration for Storm Water Phosphorus Removal — Andrew J. Erickson, John S. Gulliver, and Peter T. Weiss; 133 (5), 485-97 (2007).

Werner, Peter

Adsorption and Abiotic Transformation of Methyl *tert*-Butyl Ether through Acidic Catalysts — Axel Fischer, Claudia Oehm, Michael Selle, and Peter Werner; 133 (8), 827-33 (2007).

White, Daniel M.

Total Coliform Survival Characteristics in Frozen Soils — Hrishikesh Adhikari, David L. Barnes, Silke Schiewer, and Daniel M. White; 133 (12), 1098-105 (2007).

Wilson, Bruce N.

Calibration and Validation of an Empirical Dissolved Oxygen Model — Omar I. Abdul-Aziz, Bruce N. Wilson, and John S. Gulliver; 133 (7), 698-710 (2007).

Wolfe, William

Beneficial Reuse of FGD Material in the Construction of Low Permeability Liners: Impacts on Inorganic Water Quality Constituents — Chin-Min Cheng, Wei Tu, Behrad Zand, Tarunjit Butalia, William Wolfe, and Harold Walker; 133 (5), 523-31 (2007).

Wu, Jiunn-Tzong

Water Quality and Ecosystem Modeling of Tidal Wetlands — Chou-Ping Yang, Jan-Tai Kuo, Wu-Seng Lung, Jihn-Sung Lai, and Jiunn-Tzong Wu; 133 (7), 711-21 (2007).

Xiao, L. W.

Horizontal-Flow Biofilm System with Step Feed for Nitrogen Removal — M. Rodgers, L. W. Xiao, and J. Mulqueen; 133 (6), 569-74 (2007).

Yanful, Ernest K.

Tropical Soils–Acid Mine Drainage Interactions: Breakthrough Curves and Some Transport Parameters — Eric M. Frempong and Ernest K. Yanful; 133 (7), 733-41 (2007).

Yang, Chou-Ping

Water Quality and Ecosystem Modeling of Tidal Wetlands — Chou-Ping Yang, Jan-Tai Kuo, Wu-Seng Lung, Jihn-Sung Lai, and Jiunn-Tzong Wu; 133 (7), 711-21 (2007).

Yang, Ji

Adsorption of Carbon Disulfide (CS_2) in Water by Different Types of Activated Carbon—Equilibrium, Dynamics, and Mathematical Modeling — Ji Yang, Juan Peng, Jinping Jia, and Haijun Fang; 133 (3), 294-302 (2007).

Yang, Wei

Genetic Algorithm Solution of a Gray Nonlinear Water Environment Management Model Developed for the Liming River in Daqing, China — Dezhi Sun and Wei Yang; 133 (3), 287-93 (2007).

Yang Low, Swee

Off-Site Exposure to Respirable Aerosols Produced during the Disk-Incorporation of Class B Biosolids — Swee Yang Low, Tania Paez-Rubio, Carolina Baertsch, Matthew Kucharski, and Jordan Peccia; 133 (10), 987-94 (2007).

Yannopoulos, Andreas

Cost and Land Functions for Wastewater Treatment Projects: Typical Simple Linear Regression versus Fuzzy Linear Regression — Basil Papadopoulos, Konstantinos P. Tsagarakis, and Andreas Yannopoulos; 133 (6), 581-6 (2007).

Yeh, Gour-Tsyh

Analysis of Point-Source and Boundary-Source Solutions of One-Dimensional Groundwater Transport Equation — Hund-Der Yeh and Gour-Tsyh Yeh; 133 (11), 1032-41 (2007).

Yeh, Hund-Der

Analysis of Point-Source and Boundary-Source Solutions of One-Dimensional Groundwater Transport Equation — Hund-Der Yeh and Gour-Tsyh Yeh; 133 (11), 1032-41 (2007).

Yetis, Ulku

Effects of Bromide Ion and Natural Organic Matter Fractions on the Formation and Speciation of Chlorination By-Products — Nuray Ates, Ulku Yetis, and Mehmet Kitis; 133 (10), 947-54 (2007).

Young, James C.

Mechanisms of Ballasted Floc Formation — Ana. V. Ghanem, James C. Young, and Findlay G. Edwards; 133 (3), 271-7 (2007).

Yu, Tong

Dissolved Oxygen Downstream of an Effluent Outfall in an Ice-Covered River: Natural and Artificial Aeration — Iran E. Lima Neto, David Z. Zhu, Nallamuthu Rajaratnam, Tong Yu, Mark Spafford, and Preston McEachern; 133 (11), 1051-60 (2007).

Yuan, Liangyong

Retarded Transport and Accumulation of Soluble Microbial Products in a Membrane Bioreactor — Lianfa Song, Shuang Liang, and Liangyong Yuan; 133 (1), 36-43 (2007).

Yuan, Songhu

Effect of the Composition of Anodic Purging Solutions on Electroosmosis — Songhu Yuan, Meng Tian, Taiping Li, and Xiaohua Lu; 133 (6), 627-32 (2007).

Zagorc-Končan, Jana

Pretreatment of Highly Polluted Pharmaceutical Waste Broth by Wet Air Oxidation — Andreja Žgajnar Gotvajn, Jana Zagorc-Končan, and Tatjana Tišler; 133 (1), 89-94 (2007).

Zand, Behrad

Beneficial Reuse of FGD Material in the Construction of Low Permeability Liners: Impacts on Inorganic Water Quality Constituents — Chin-Min Cheng, Wei Tu, Behrad Zand, Tarunjit Butalia, William Wolfe, and Harold Walker; 133 (5), 523-31 (2007).

Zhang, Weihua

Chemical-Enhanced Washing for Remediation of Soils Contaminated with Marine Diesel Fuel in the Presence/Absence of Pb — Weihua Zhang and Irene M. C. Lo; 133 (5), 548-55 (2007).

Zheleznyak, M. J.

Aquatic Assessment of the Chernobyl Nuclear Accident and Its Remediation — Y. Onishi, S. L. Kivva, M. J. Zheleznyak, and O. V. Voitsekhovich; 133 (11), 1015-23 (2007).

Zhu, David Z.

Dissolved Oxygen Downstream of an Effluent Outfall in an Ice-Covered River: Natural and Artificial Aeration — Iran E. Lima Neto, David Z. Zhu, Nallamuthu Rajaratnam, Tong Yu, Mark

Spafford, and Preston McEachern; 133 (11), 1051-60 (2007).

Zou, Rui

Closure to "Integrated Hydrodynamic and Water Quality Modeling System to Support Nutrient Total Maximum Daily Load Development for Wissahickon Creek, Pennsylvania" by Rui Zou, Stephen Carter, Leslie Shoemaker, Andrew Parker, and Thomas Henry — Rui Zou, Stephen Carter, Leslie Shoemaker, Andrew Parker, and Thomas Henry; 133 (11), 1073-4 (2007).